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THE
DENTAL DIGEST
George Wood Clapp, D.D.S., Editor

Vol. XXIII JANUARY, 1917 No. 1

WITH OUR MILITIA AT THE BORDER

By C. Judson Hollister, D.D.S., Philadelphia, Pa.*

There was trouble at the border and it was growing worse. This particular trouble was not with the heat, the bandits, the homesickness or even the privations of camp life, though it may have been increased by all these. It was with the teeth of the soldiers and it threatened to become serious.

The troops were strung along the Texas border. Some of them were regulars, to whom these conditions of life were part of the day's work, and they were physically hardened. But many thousands of them were militia troops, hurriedly summoned to their barracks, mustered into Federal service and sent unprepared to a border which was unprepared for them.

One of the faults of a democracy is that it rarely does things well, at least in advance. Politicians occupy places which should be held by trained and competent men. They are often incapable of doing much or doing it well. They frequently manage to prevent any one who knows his business from getting anything done, when it should be or as it should be. The result is that after the Mexican situation had been growing more and more difficult for many months, an order was suddenly issued to federalize the Guard and send it to the border. The Guard was not ready, in a military or personal sense. The men were physically unprepared. And preparations which should have been complete to the last

*This is the first of a series of five articles. The second is expected to appear in the February issue.

detail, were left uncompleted until the last moment and then done hurriedly and imperfectly.

Among these details came the care of the teeth of the militia. It might have been overlooked entirely had it not thrust itself upon attention by the number of men disqualified for service through troubles arising in connection with the teeth.

Of the militia troops scattered along the border, 13,000 were from Pennsylvania. So many of these men suffered from dental diseases that Captain Tilghman wrote to Philadelphia asking whether a dentist could not be sent down by private enterprise to serve the pressing needs of these men. He stated that 95 per cent. of the men were in need of immediate dental service, that the benefits from such service would well justify the cost, and that the dental corps being organized by the government could not be ready for service for some time.

Mrs. George W. Childs Drexel, President of the Pennsylvania Woman's Division For National Preparedness, agreed to pay for the necessary equipment for a dentist to serve this need and to maintain him for two months. The opportunity for service and the novelty of the affair attracted me and I gladly consented to go.

Two days after my decision was reached, my dental equipment was on the way and I followed a little later. This was about 40 days after the militia reached the border and long after such service should have been available.

When I arrived at Camp Stewart, about 9 miles from El Paso, I found my service greatly needed, but no facilities for me to serve the men I had come so far to benefit. There was no tent or other place in which to work, and so, after several days' delay, I set up my outfit in the fly of my sleeping tent for the purpose of rendering at least temporary relief.

"I set up my outfit in the fly of my sleeping tent"

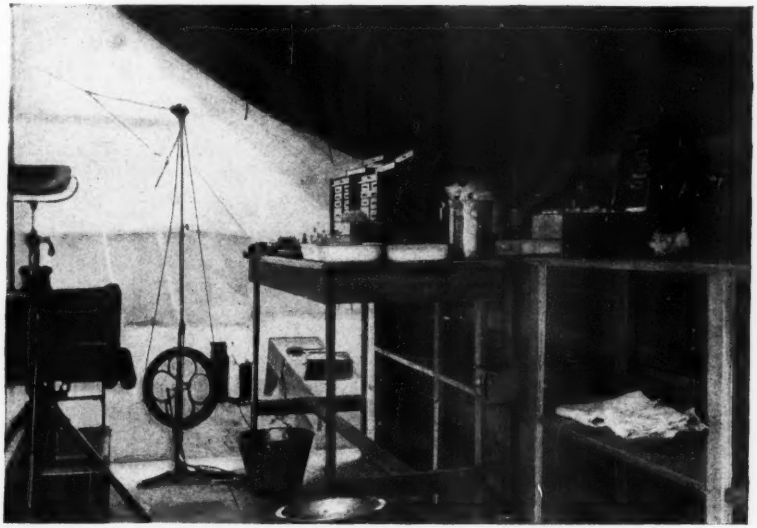
A week later I was provided with a 14 x 14 wall tent, with fly, well floored and with shelves for instruments, a table and a

desk. A member of the hospital corps was assigned to assist me and sterilize instruments, and the Drum Major of the 3rd Penna. Infantry Band appointed himself my bookkeeper.

Please understand that I have no criticism to make of the coöperation of the officers and men on the border. They were doing the best they could in a situation which called for a thousand things to be done that should have been done months or years before. But I think that severe criticism justly holds against the men whose duty it was to foresee and provide and who lacked both the foresight and the provision. If we are ever to have a military organization worthy of the name, we cannot trust to the improvisations of the moment in places where the most painstaking detail alone will suffice, because the price is too heavy, as I hope to show.

In spite of the great need of dental service, I was not very cordially viewed by the enlisted men, at first. They said among themselves "I won't go to that butcher unless I have to." But a number had to come, and when they found themselves treated with courtesy and consideration, a feeling of welcome replaced the hostility and the demand for service speedily became greater than could be met.

The day's work usually began at the time of the "Sick Call" at 6:30 A. M., and so great was the number of men in need of immediate "emergency" service that after the first few days I rarely left the chair until "mess call" at 5:30 P. M.



"A week later I was provided with a 14 x 14 wall tent and fly, well floored and with shelves for instruments"

The service was arranged to relieve the worst cases first, and to serve the greatest number rather than to complete fine work for only a few. Extraction was a last resort, but was so frequently necessary that during my stay I extracted 725 teeth.

The smallest number of patients treated in any one day was 37 and the largest number was 58, not counting those for whom oil of cloves was applied or for whom treatment of sockets after extraction was necessary.

When I arrived at Camp Stewart, I was told that the government had 40 commissioned militia dental surgeons under contract to attend to the teeth of the guardsmen and that 40 dental equipments were on the way, but that no equipment had yet reached El Paso. I understand that each dentist was receiving $166.67 per month. When I left El Paso, two months later I was told the same thing, also with the story that no equipment had yet arrived.

Thus during a period of more than 2 months, if my information is correct, 40 capable and willing men had been idle while thousands suffered for their services. The financial loss approximating $13,000 was probably the smallest part of the price of this item of unpreparedness. Of the accuracy of this statement I felt pretty sure, because my office had been the only one where the guardsmen could receive dental service, the Post Dental Office at Fort Bliss, with three operators, having all it could do to attend to the teeth of the regulars.

I had many interesting experiences and learned many things which are important to our preparedness for either peace or war. I propose to tell of some of these things in the following issues of this magazine.

218 E. Sedgewicke St.

C. Judson Hollister, D.D.S.

Good-bye, old Year! Thy world of Love
Glows once again on mem'ry's wings;
Thy world of pain, the Heavens above
Will hide in flow'rs, with songs of Spring.

That star of Hope beams out to-night—
Go forth for that with ringing cheer:—
Uproot the wrong! Uphold the right!
And bring to all a Bright New Year.

—*Healthy Home.*

LOVING CUP FOR MR. THOMAS FORSYTH

This beautiful cup, purchased by contributions from more than 4,000 dentists, will be presented to Mr. Forsyth, by Dr. H. E. Frisell, at a banquet in Mr. Forsyth's honor at Hotel Somerset, Boston, on the evening of January 20, 1917.

The cup by Tiffany & Co., shows 18 figures of children in happy postures of healthy childhood, a condition which the Forsyth Dental Infirmary has made possible to many children who could not otherwise have enjoyed it.

On the upper part of the bowl is the following inscription: "To Thomas Alexander Forsyth from the Dentists of All Nations in Appreciation of the Benevolence of the Forsyth Family, Who Gave to Humanity the Forsyth Dental Infirmary for Children—1917."

Members of the dental profession are invited to attend the banquet and presentation—price $5 per cover. Tickets may be procured from Dr. A. H. St. C. Chase, 129 Marlborough St., Boston, Mass.

ORTHODONTIA OF THE DECIDUOUS TEETH

By E. A. Bogue, M.D., D.D.S., New York

CONCLUSION

In illustration of the articles in "Orthodontia of the Deciduous Teeth" in the October, November, and December numbers of the Dental Digest, I present two portraits, one of a child two and a half years old (See Figure 46), another of a child four years and five months old (See Figure 48) together with the model of the teeth of the first child at six and a half years of age (See Figure 47) and the model of the teeth of the second child at four years and five months (See Figure 49).

Figure 46

Figure 46 is a portrait of a child $2\frac{1}{2}$ years of age whose temporary teeth show the normal spacing between them that is described in the following pages:

A model of these teeth at $6\frac{1}{2}$ years of age is to be seen on page 7.

These cases have not been interfered with and are just natural, nearly normal cases, showing a spreading apart of the incisor teeth, and a breadth of thirty-one millimeters in one case, and in the other thirty millimeters, from upper second molar to second molar at the gum margin.

I present also models of a third case (See Figure 50) at five years of age, showing the temporary teeth nearly regular, but the upper arch **only twenty-seven millimeters broad** at the second molar region.

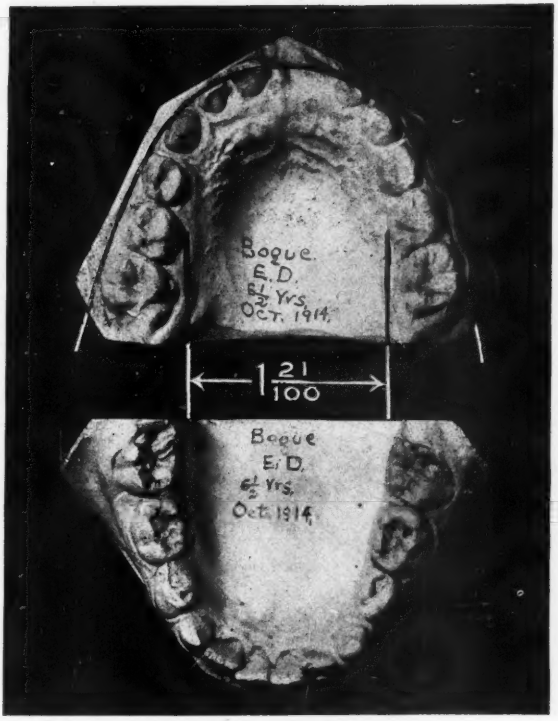


Figure 47. Impressions at 6½ years

This child of $6\frac{1}{2}$ years had never seen a dentist until these impressions were taken. His mother presented me with his portrait taken at $2\frac{1}{2}$ years, which shows separations between the teeth at that age. (See Figure 46.)

Figure 48

Portrait of a child, age 4 years and 5 months, with normal spaces existing between the teeth as described in these pages. (See Figure 49.)

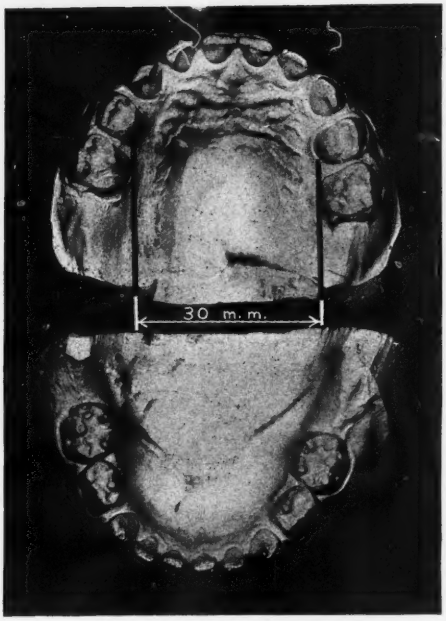


Figure 49 is a model of Figure 48

Figure 49 shows separations between the teeth that have existed since the temporary teeth came through.

This dental arch being 30 mm. broad can grow larger unaided if health remains good.

Figure 50 represents a child of 5 years only 27 mm. broad between the 2nd molars and so nearly regular in dental arches that his mother declined to interfere.

Figure 50

Adenoids and tonsils had both been removed before spreading was considered, but the child's health remained very delicate. The mother declined to interfere with so regular a dental arch, even in the hope of improving the child's nasal breathing.

The next model, taken eight months later (See Figure 51) shows the two lower permanent central incisors coming inside the row of temporary teeth. This evident irregularity alarmed the mother, who at once brought the child for treatment. Figure 52

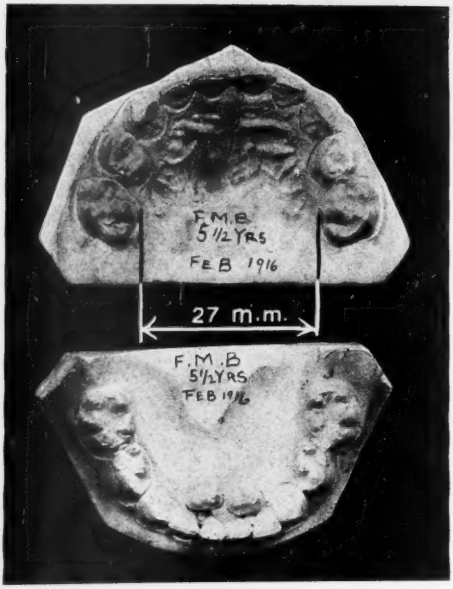


Figure 51

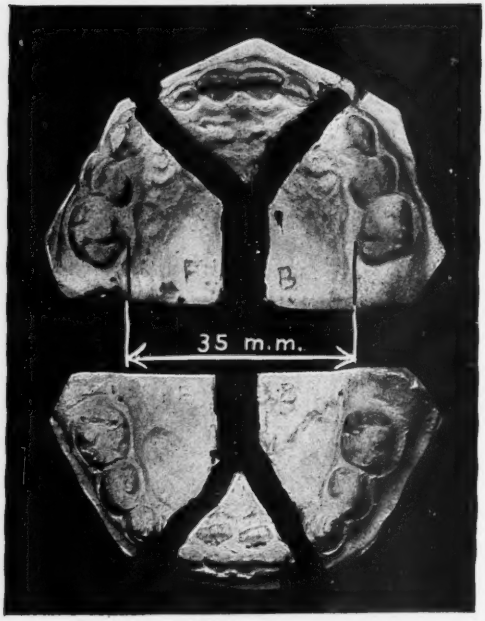


Figure 52

shows the models of the teeth at this stage. Each model is split into three pieces and rearranged to indicate the size of arch desired for the easy eruption of the permanent teeth.

Fixtures were manufactured on these split models after the Ainsworth pattern, which moves the teeth bodily without tipping.

The wire arches in this case were made of 18 gauge gold and platinum clasp wire, with a double U at each end, so that a certain degree of advance, as well as

spread, might be attained by the same arch. These appliances were then adapted and the bands were cemented to the second temporary molars in the mouth. (See Figure 53.)

After wearing these appliances three months, the upper dental arch had broadened from twenty-seven to thirty-five millimeters and

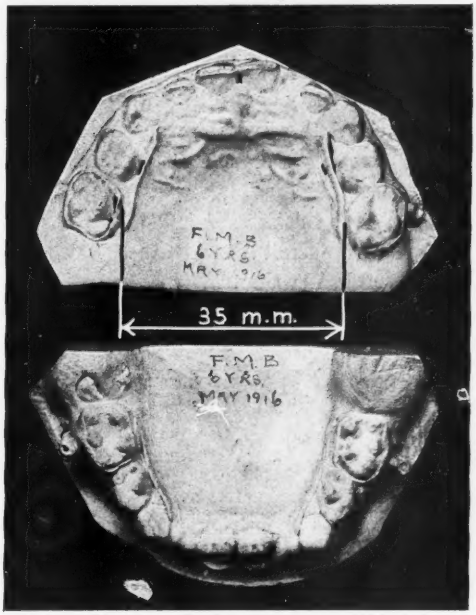


Figure 53

the lower ones had correspondingly spread, so that the occlusion remained good.

The advance of the incisors took place from the pressure of the tongue only. (See Figure 53.)

There was a constant improvement in the general health, with a decided increase in vigor, height and weight and entire cessation from mouth breathing and snoring.

PARTIAL DENTURES*

By V. C. Smedley, D.D.S., Denver, Colo.

Plaster of Paris is without doubt the material par excellence for the taking of partial impressions. Use a sherbet glass and a Lashar silver case knife ground down to the size of a spatula for mixing plaster for impressions. We should be ashamed to approach a patient with a dirty looking rubber bowl and a rusty or tarnished spatula. A plaster impression is disagreeable enough to a patient when it looks clean and appetizing. Use the orthodontist's deep-sided trays and follow very closely his procedure in impression making. The trays as we buy them are too narrow to provide sufficient thickness on all sides of the teeth to prevent breaking of the plaster into small bits, at times. Take the horn mallet and a block of wood and batter the tray out, increasing the width about a third, especially around the front. Trim the wings with a jack-knife or a pair of shears, or build out with sheet wax to meet the requirements of the case in hand. Keep your trays well polished with the lathe, brushes, pumice and whitening. Use "French's Selected Impression Plaster," the best is none too good, and mix with distilled water at the uniform room temperature and with a definite proportion of potassium sulphate or sodium chloride to hasten setting; 8 grams potassium sulphate to 1,200 cc. of water is about right; add a little essence of peppermint, cologne, or other pleasing flavor to the water. Take glass half full of water and add to it slightly less plaster than will take up all of water. Do not stir but when plaster has become thoroughly saturated pour off excess of water. Ask patient to rinse mouth while you fill tray, then carry plaster first well up or down between the cheeks and the process into undercuts and against the muscle attachments with the spatula and your fingers; follow immediately with the full tray. As the tray is carried home with the slight oscillating motion that a bricklayer uses in placing a brick, an excess of plaster should be forced out around all of the margins. With lower impression you steady the tray with one hand and pull the cheek muscles out with the other. At the same time ask the patient to raise the tongue, insisting upon their touching the upper lip with it, if necessary to get it well above the margins of the tray. Allow ample time for thorough setting of the plaster—it cannot get too hard. One should bear in mind an accurate picture of the positions of the teeth in the mouth, and the knife cuts for the removal of the impression in sections should be made accordingly.

*Read before the Colorado State Dental Association, June 1916.

As soon as the impression has dried out sufficiently for wax to stick to it, the parts should be assembled and held with pieces of match-sticks and sticky wax. Scrape the impression about the necks of the teeth to relieve as far as possible the adjacent gum tissue and process from the familiar destructive pressure of a partial plate.

In addition to scraping the impression for relief, use lingual and palatal bars and occlusal lugs or rests on your clasps and other attachments; make it a practice never to extract a healthy root, no matter how weak it may be, where a partial plate is to be worn; but instead, excise and cap them at the gum level and let them carry the weight of the plate, thus preventing excessive absorption of the alveolus, and permitting a marked increase in masticatory stress, relieving patient and operator from much of the distress and nuisance of bruised and sore gums. There may still be some absorption with intrusion of the roots, but the benefit derived is well worth the effort and expense involved. The patient should be warned against leaving the plate out for any great length of time, where isolated roots are treated in this way, as there is danger of them migrating sufficiently to interfere with the fit of the plate. Where the length of the bite will permit and the roots are sufficiently strong, the caps may be made to stand a little above the gum to assist in steadying and retaining the plate. In the lower jaw this is often sufficient retention. The caps should be in place when the impression is taken, removed and placed in the impression when the cast is poured, and allowed to remain in the cast until after vulcanization.

The old-fashioned clasp is after all probably the most generally useful and satisfactory plate attachment that has been devised to date, as it may be modified and perfected by modern methods of construction and application. The casting process makes possible a much better clasp than we used to be able to produce. We have to sacrifice some of the springiness of the metal and increase the thickness for sufficient strength; but the more perfect fit procurable more than compensates for this loss. Take an impression of the individual tooth, pour with hard plaster, moisten cast so that wax will not stick to plaster, carve the clasp in tough baseplate wax about the largest diameter of the tooth with a lug running over onto the occlusal surface, if same is indicated (and it usually is). Attach sprue, remove, invest and cast; grind, fit and polish on the cast before seeing the patient again, when clasps should be fitted on the teeth in the mouth and a complete impression taken. Place the clasps in the impression and carve the plaster away to make a definite shoulder on the cast for the clasp to rest on, especially where lugs are not used, for the clasps must be removed from the cast for soldering of spurs. When the case is waxed up and ready for flasking, soft-solder a brass wire

to the clasps, this wire to be imbedded in the investing plaster to prevent movement of the clasps in packing and closing the flask.

There is often much to be gained in a splinting and steadying way by clasping two teeth, one mesially and one distally, on the same side. Special care must be taken in clasping conveying teeth not to have the clasps extend into deep undercuts. This may be avoided either by trimming the impression away before pouring the cast of the individual tooth, by filling in the undercuts on the cast with hard wax or plaster before applying the casting wax, or by making the clasp thick enough to stand grinding away sufficiently when the case is finished.

It has long been claimed by some men that every tooth should be crowned before being fitted with a clasp. This is surely an error; especially with the more perfect fitting cast clasp, which largely excludes food débris from between the clasp and the tooth, and by its more even bearing upon the tooth minimizes the abrasive wear of the enamel. Also with the infinitely greater attention that is being paid in recent years to the matter of mouth cleanliness by dentist and patients alike, the proportion of cases where crowns or even fillings will subsequently be required because of the clasp being worn is so small that the crowning of such teeth in the beginning becomes nothing short of an absurdity.

The forms of attachment other than the clasp for which I find most use are the Gilmore and the tube. Though the telescope crown, the split pin, the dove-tailing lug, and others may be used to better advantage in certain cases.

Suffice it to say that the Gilmore is indicated where the roots in the mouth are few, scattered or weak, and where they should be excised to eliminate leverage; but there is an objection to it in that it holds the plate in firm contact with the gum tissue, preventing its normal rebound after compression, and there seems often to be a sort of strangulation of the gum tissue about the necks of the teeth where the Gilmore is used, but even so it is invaluable in the cases referred to above.

The tube attachment on the contrary is indicated only where the teeth are strong enough to stand with the full length of the crown, and it may be attached to either a bridge, a crown or an inlay; it has the decided advantage of permitting the slight rebound of the plate that is best for the gum tissue beneath it, and yet with the length of tube and core the plate is prevented from loosening too much.

Lingual and palatal bars must not be passed without comment in the consideration of partial dentures, for they are indispensable where the best thing for the patient is sought. This is especially true of the lingual bar; which may be made in three different ways according to the shape of the mouth and special requirements of the case; of 10 or 12 gauge round

clasp metal wire; of cast clasp metal; or of vulcanite. If there is sufficient room between the lingual attachment and the necks of the teeth the round wire is perfectly good and will cause the patient no annoyance whatever. If, however, the space is limited, use the cast bar, making it triangular in shape, quite thick at the base and tapering to a feather edge at the top. If, on the other hand, the pocketbook is limited, very often a vulcanite bar can be made of the same triangular shape, thick at the base and thin at the top, that can pass well below the necks of the teeth, and yet be plenty strong, and be worn with comfort and without inconvenience. The old idea we used to have that a plate should always be trimmed to a feather-edge beneath the tongue is entirely in error, and is responsible for many a sore mouth and many a broken plate. In every case, whether plate stops short of the necks of the teeth or not it should be made thick at the bottom and thin at the top. A very nice case may be made where one or more of the incisors are missing by simply soldering same to the lingual bar before the posterior teeth are attached with vulcanite.

A palatal bar plate should extend across the roof of the mouth well back of the rugae and the palatal contour just back of the anterior teeth, and it may consist of two separate half round 10 gauge clasp metal wires, or preferably in most cases of a swaged and reinforced gold band one quarter to three quarters inch in width; or it may be a vulcanite band the width and thickness to be determined by the requirements of the case in hand.

SUMMARY

Use French's Selected Impression Plaster for all partial impressions.

Use a sherbet glass and silver knife for mixing same.

Follow the orthodontist in impression making.

Widen trays to make sufficient thickness of plaster on all sides of the teeth.

Keep your trays well polished.

Do not remove impression too soon—the plaster cannot get too hard.

Relieve as far as possible the teeth and their supporting tissue from contact and pressure of the plate.

Excise and cap roots for plate support, permitting increased masticatory stress, and largely preventing resorption of the process.

Clasp, Gilmore and tube attachment.

Lingual and palatal bars.

Make the lingual surface of all partial lower plates thick below where the space in the mouth is not missed, and thin above where the tip of the tongue plays.

I claim no originality for anything in this paper, and for most I could

not place credit if I tried. The original thoughts have been gathered from general reading, from contributions to the Practical Hints of the DENTAL DIGEST, from attendance at clinics and at manufacturers' exhibits, from Drs. F. H. Orton, F. H. Skinner, George Henry Wilson, Dayton D. Campbell and A. DeWitt Gritman, from my assistant Mr. Ralph J. Smith and from hard knocks of experience.

Before starting to make any denture in any mouth, study carefully the conditions there. Frequently, study models should be made; and if you are equipped for it, photographs also; both before and after. These things will be good not only in assisting you in outlining your work, but also as a guide in carrying the job to completion, and as a record for all time. Let me repeat—study conditions carefully and if the bite should be opened, open it, even though it involves the building up of a number of natural teeth. And if elongated and interlocking teeth should be ground off, grind them; even, in extreme cases to the extent of necessitating devitalization or extraction to correct the occlusal planes and establish masticatory efficiency. All of this, of course, is providing your patient can be persuaded to stand for it; and he will be much more apt to stand for a bigger service and a larger expenditure if he sees you making a careful and intelligent study of conditions upon which you base your judgment and advice.

There is a great field for this kind of work, gentlemen, and I wish I could persuade more men to follow it as a specialty. When followed somewhat along the lines indicated above it is intensely interesting, and when results are right it is extremely satisfactory. There is no danger of the time coming during the life of any one here to-day when artificial dentures will not be needed. On the contrary, the wholesale and increasing extraction of teeth for the cure and prevention of various systemic disorders makes a big field for this work.

Dentists and dentistry, and the crude, cruel, barbarous plate work of the past, and I am sorry to have to add, also sometimes of the present, are largely responsible for the tenacity with which people insist upon retaining sick teeth in their mouths until they actually or practically drop out.

It is time for an awakening and a reformation, and I believe the day is right at hand when the pendulum will swing out from ocean to ocean for better dentures as it is now swinging out for the elimination of dental foci of infection.

And I believe it behooves those of us who enjoy things mechanical and constructive to be prepared to meet the emergency.

604 CALIFORNIA BUILDING.

THE SPECIALIST

WHO AND WHAT IS HE?

By Paul Cassidy, D.D.S., Cincinnati, Ohio

To whom shall we refer patients for any special service? If the demands of general practice have consumed all our time, if we know that other dentists can do certain things for them better than we can, shall we perform the service poorly or shall we refer them to another?

Obviously, if we refer all our patients to others, we shall not earn a living. If we are likely to lose patients whom we refer, we shall hesitate long.

This author sets forth very reasonably the conditions those practitioners should establish who ask for referred cases. If they are not willing to establish such conditions and walk uprightly in the sight of all, they cannot complain if men who have worked long and hard do not refer cases to them.—Editor.

Within the past ten years a considerable number of men have abandoned the general practice of dentistry to take up their life work in special fields or branches of the profession. It is true, that in the very largest cities this has been the custom for many years but it is only since the beginning of the present century that the movement to specialize in dentistry has been widespread, until now every community that rises to the dignity of the title "City" has at least three or four men limiting themselves to one particular branch of dental practice.

These specialists have increased in such numbers and have become so familiar to the general body of dentists and to the public, as well, that it behooves us to consider them carefully, gauging them exactly to find how they measure up to the claims they make for themselves and to the standards we have set up for all the members of the profession, whether claiming to be specialists or otherwise.

Oftentimes the border lines between specialization and charlatanry in our own, as well as in the medical profession, are drawn too closely together; an altogether impressionable public is little capacitated to judge the dross from the pure metal and we ourselves are oftentimes misled by the glitter and tinsel surrounding a name. The very term "Specialist" has, in many cities, come to carry a stigma in medical circles because of the chicanery of many individuals posing beneath that title.

It is well for us to reflect at times upon the relation the specialist bears to each of us, and, through us, to the public we both serve. That connection, while seemingly indefinite and a thing of no moment to the dentist who refers but few cases to a specialist, is yet very intimate to

every man and woman practising dentistry. It is of this intimate relation of the dental specialist to the general practitioner, and his bearing upon the vital interests of both patient and dentist that I purpose to write.

Quite aside from any question of ability, for judgment as to that must necessarily be an individual matter, I will endeavor to show just which of those men who have asked and are asking for the support of the general practitioner, are entitled to encouragement and countenance. The simple fact that a man enjoys membership in our own local, or in our State or the National Society, is hardly a sufficient reason to entitle him to our support, as many who walk and pose in the higher places are the least dependable and worthy of our favor.

A specialist has been defined as one who limits himself to a definite field of endeavor.

Dentistry itself is a special field and the men who follow it as a calling are, strictly speaking, specialists in that they do limit themselves to working in and upon the teeth and the immediately surrounding tissues.

The labors and difficulties attending the practice of dentistry have logically resulted in the specialty being again divided into various branches, until now the man who limits himself to the making of artificial dentures, the one who practises crown and bridge making only, the Orthodontist, the Exodontist, the Prophylactist and the one who limits himself to the dentistry of children are familiar not alone to dentists, but to a large body of the general public.

When any man honestly begins to specialize, it must be for one of three reasons. He has shown a special aptitude in and love for the field in which he purposes to labor; he has failed in the practice of general dentistry and hopes to find easier support in a limited field of endeavor; or because of what seems to be an existing necessity for some one to specialize in a particular city in any one of the branches we have named. All three of these men may be worthy of our support. The first one unquestionably is. The second may find himself and improve with time. The third may be the very individual for the place and then, just as well, he may not prove so to be.

There are other reasons why a man may specialize, the most pernicious of which is that he may establish in a short time a large following among referred cases, the names and addresses of whom are carefully tabulated, until such a time as he feels sufficient assurance to enter into the practice of general dentistry.

The specialist in extracting can scarcely be considered consistent if he also assumes to specialize in Orthodontia, and yet there is more than one such in several cities. The man who has an office in one city in the morning, practising general dentistry there and in the afternoon

in another city an office where he practises the specialty of Prophylaxis is a not unknown quantity in many communities. Men have been known to announce themselves as specialists in Exodontia and, after having had cases referred to them for extracting, have donned the robes of the specialist in bridge work and treated the cases as such. Some men have requested the dental profession to refer to them cases that come within the work of some announced specialty and have then assumed an office associate in the general practice of dentistry.

These things in themselves, may be innocent enough, and yet, upon thorough examination, they seldom prove so to be. The only true specialist in dentistry, the only man worthy of the commendation and the practical support of the dentists in his community, is he who absolutely limits himself to one well defined field. Of course, several of the specialties of dentistry are so closely allied and interdependent that it is foolish to say that one man cannot properly practise them as one specialty. Owing to necessity, the Exodontist is an anesthesia specialist and properly an oral surgeon in every sense of the term. He might possibly also include Prophylaxis. He would still be limiting himself in a very exact way to a definite field of labor. It is only to that man who does so limit himself that a dentist can refer a patient with the utmost certainty that, as soon as the immediate work in hand is completed, the patient will return, with no effort having been made, no studied or even unconscious influence having been exerted to wean him or her away.

Any specialist honestly limiting himself to an announced field who has associated with him a dentist in general practice may never, by action or word, in the slightest degree, endeavor to influence any directed cases away from the dentists referring them to him, and yet the fact remains that the very knowledge, on the part of the patient, that there exists such an association is an influence to that very same end. So illogical is the average mind, that, if the Exodontist, in spite of a morbid fear of him which practically all men and women hold, can painlessly remove teeth, these very same men and women feel that his knowledge concerning all things dental far surpasses that of their regular dentist. Specialists everywhere will bear me out when I say that not one single day passes in any busy practice that the question is not asked, "Now whom would you recommend as the very best to make my teeth?" The honest action is always to answer to referred cases, "Go back to your regular dentist, of course." The proper and advisable action, in cases that are not referred, is always the definite answer, "I do not know." However, how can a specialist give this answer in the latter cases, when in his own office is a man who could very well do the work and whom the patient has a right to consider of the very highest rank.

In this connection I recall an experience of my own. A woman of about forty years of age, in other words, sufficiently old to be sensible, was referred to me by a dentist in our city, for the removal of all of her teeth. After the operation was satisfactorily performed and the patient about to be dismissed, she asked, "When am I to return; in about two weeks?" I replied that she was to return immediately, in the event anything bothered her. She insisted, however, upon knowing exactly when she was to return for me to take the impressions for her artificial dentures. I replied, naturally, that I had no further work to perform for her, and that she must rely entirely upon the directions her referring dentist had given her. I was amazed when she informed me that she had no intention of returning to him. Argument with her was entirely useless, and she finally departed in the heat of anger. She went immediately to her dentist and cautioned him that the specialist to whom he was referring his extracting cases was trying to "steal" his patients for other work. Only my lack of equipment to do other work and an entire absence of association with any one who had such equipment convinced that dentist of my entire honesty of purpose and that we both were dealing with a crank. What would he have thought, what could he have thought, even though my actions had been precisely as I have related, if I had had associated in my office with me, a dentist in regular practice? These same unfortunate experiences will be the lot of any one associating himself with one or more specialists in other lines of practice.

I can remember very well, when practising general dentistry in Southern Kentucky, a gruff old medical practitioner apologized to me because he did not refer to me any of his patients, although he himself did come to me for all of his dental work. I was at that time associated with a practitioner of general medicine. He said he knew that neither I nor my associate would endeavor to influence his patients away from him, but that my association with a younger and a neater man in larger and more attractive quarters than his own, would be a sufficient influence to that very same end. How heartily I agreed with him is evidenced by my entire lack of entangling influences from shortly thereafter until to-day.

For his own protection, for that of the dentist and patient as well, every specialist owes it to himself to maintain an office devoted entirely to the work of that specialty which he has announced for himself.

Less apparent in his baneful influence than the men belonging to the classes I have enumerated is the duofold or manifold specialist, who, in his own mind and upon his announcement cards, holds himself a specialist in "Pyorrhea and in Bridgework," in "Orthodontia and Exodontia," in "Analgesia and the Treatment of Teeth" or a conglomerate mixture of all of these.

The familiar figure who is practising general dentistry and "specializing" in some one branch he loves, or in which the remuneration is comparatively great, has a most certain, moral right to do so but he can hardly expect the more careful members of the profession to refer cases to him, if there is a bonafide specialist in that line of work available, or if they can possibly perform the work themselves.

Any man certainly has the right to devote his mornings to the practise of general dentistry and, in the afternoon to look after the needs of those seeking him for "Orthodontia." There are many of these men in the profession, honored and honorable and a credit to us all. They regulate their day's labor in the most convenient fashion to themselves and to those seeking their services. They accomplish more in the way of orthodontia than some who limit themselves to that branch, but they neither call themselves specialists, nor announce themselves as such, nor invite their fellows generally to send their cases to them. These are men practising general dentistry and devoting themselves largely to a particular branch because of a considerable demand among their clinetele for such services.

There are other men, in general practice, who find their time largely devoted to the extracting of teeth because they have been particularly successful in that field. No one could or would quarrel with them for performing work of any nature whatsoever that presents. They are general practitioners in every sense of that word's meaning and they assume to be nothing else.

I do, however, deny that these same men can claim to be specialists, no matter how proficient they may be, and can announce themselves as such or should invite the members of the general profession to refer to them their cases on any other than a personal basis, while maintaining their general practices as anchors to the windward.

In other words I deny to any man, dentist or not, the right to assume to be that which he knows he is not. If a man appropriates to himself the title of "Specialist," certain additional obligations are by that very fact imposed upon him and I say then let him truly specialize. If, on the other hand, he cares to remain in general practice and largely devotes himself to one line of endeavor and assumes no other position than that of a general practitioner, no one could, honestly, deny him that right.

To carry on a general practice and to pretend to specialize; to assume to be a specialist in four or five conflicting branches or to announce one's self as a specialist in any one of them, as occasion warrants; really to specialize and to associate one's self intimately in office practice with men in general dentistry can scarcely be regarded as consistent and certainly not honest within the definition of the term.

PREPARATION FOR SOCIETY MEMBERSHIP

L. W. Dunham, D.D.S., New York

Dental societies are ever eager to increase their membership, and while there are still a number of dentists in private practice who are not society members, the advertising dentists are the ones about whom the society members are really concerned.

The following suggestion is offered as a means of building membership in the societies and at the same time lessening the number of recruits to the "alien colors."

Almost every city which contains a dental college, harbors several advertising offices, and a dental society.

It is customary for dental societies to receive applications for membership from graduates. These applications are secured through solicitation of society members or voluntary application of the prospects, but in any event, nothing is done until the man is a graduate and is located.

If he enters private practice he is eligible to membership in the society within whose territory his office is situated.

If he locates in an advertising office either as an assistant or as proprietor, he is outside the pale, a lost soul, and a **lost membership prospect.**

Almost every senior class in dental colleges contains one or more students who are affiliated with advertisers either through having worked in an advertiser's laboratory or being related to an advertiser.

Quite naturally and without any ulterior motive, these men often invite their friends among the students to visit the office or laboratory, where they work at odd times, during the college term and in the interim between sessions.

Students who are short of funds usually welcome an opportunity to earn something as they attend school and quite often this chance is found in the laboratory of one of the lower class advertising offices.

"Ready money," and "quick money" are often synonymous with "advertising office" in the minds of students, and talks on ethics by their professors fail to satisfy the necessity for immediate business, nor do they explain how it may be obtained legitimately, i. e., without obnoxious advertising.

It is believed that this influence can be counteracted to a very great extent and a positive good accomplished for the profession by a little missionary work on the part of dental societies located in college towns.

By conferring honorary membership in the society upon all senior students attending dental college where the society is located, and send-

ing invitations to them, as to all regular members, for every meeting of the society during the college term, there would be established a relationship which would lead naturally toward the organization and away from the path of the advertiser, when once the student became a graduate and qualified to enter practice.

With every active member of the dental society serving as a committee to see that the student member is made to feel "at home" and that the meetings are made interesting and profitable for all, a great good would be accomplished for the future of the individual student and for the profession at large.

While this plan might meet with the objection that it would place a burden on the local society in fostering men whom it could not hope to secure as members on account of their location after graduation, that matter could be disposed of very well by allowing the society a percentage of the first year's dues paid by the young member to his local society.

Entirely aside from monetary remuneration would be the consciousness of good work for the profession and at trifling cost, as the same overhead expenses would easily carry the student members, and their presence and the work of keeping them in line would tend to increase the general interest in the activities of the society.

If some of the "live" members would make it their business to take a student or two under their wings—a sort of "big brother" attitude, many young men would be saved from entering the advertisers' ranks, and the benefit to the individual. the society and the profession would be great and lasting.

While this suggestion would probably fall short of 100 per cent. efficiently in actual trial, it certainly would mean 100 per cent. more effort than is being made now in a perfectly legitimate field and in a much needed direction.

December 20, 1916.

Editor DENTAL DIGEST:

Please advise W. C. H., who asks for advice in the December Digest, to extract the molar in question as soon as possible. He will find the reasons very clearly stated in Black's "Special Pathology" and Thoma's "Oral Abscesses," both of which he has evidently neglected to read. These books contain knowledge that it is absolutely vital for him to possess or else close his office and quit practice.

Yours truly,

T. S. C.

CARE OF THE MOUTH AND TEETH IN CHILDREN

By S. Sydney Urrows, D.D.S., Boston, Mass.

Modern medicine concerns itself very largely with the prevention of disease and deformity, and nowhere is there wider or more effective application of the principles than in childhood.

Only in this period of life can developmental defects be successfully dealt with, and during this time occurs the greatest incidence of those diseases and infectious conditions which so largely determine the disabilities and deformities of life.

The problem of the care of the teeth, however, remains very generally neglected. Several of our large cities have splendid systems of dental clinics and more or less dental inspection is carried on in the schools, but in most places nothing is done. Indifference to the subject pervades both the medical and dental professions. Many members of the latter, indeed, seem woefully ignorant of the importance of the conservation of children's teeth, and so commonly do dentists refuse to accept children as patients, that there is often great difficulty in having necessary work done. It has been my frequent experience in trying to save the deciduous molars, or even the first permanent molar, to have dentists decline to undertake the work, on the ground that it was not worth while.

Doubtless most children are difficult and trying dental patients, and perhaps few dentists possess the tact, patience, sympathy and insight in child-nature, essential to him who would successfully deal with them, but I believe that ignorance is the chief obstacle. "The deciduous teeth are only intended to last a few years anyway, and then can be replaced, and what matters it if through early decay they are prematurely lost? Fillings to preserve them would fall out in a short time and have to be done over, so why bother with them? The permanent teeth will be crooked of course, but then they might be so anyway, and they can be straightened later if desired." Thus the voice of ignorance, and it doubtless salves many a conscience that should feel guilty. A normal deciduous dentition may be ruined by neglect or misuse. Neglect of Oral Hygiene leads to early cavities and loss of teeth, with consequent shrinkage and abnormalities of growth of the jaws, which force the incoming permanent teeth out of their natural positions. Similar effects may follow misuse, which implies the failure to utilize the masticatory function of the teeth, and may be caused by improper dietary, or by bad habits, such as bolting the food, or chewing on one side, or with the front teeth only, which may cause relatively disproportionate growth of different parts of the jaws; or caries, or painful conditions of the mouth and teeth may prevent proper mastication.

Nasal deformities, adenoids and hypertrophied tonsils, may induce changes in the normal arch; and certain systemic disorders, syphilis, rickets, and malnutrition may profoundly affect the development of the jaws and teeth. Deformities of the palate and dental arches are almost invariably found in the mentally defective, while cretins quite constantly exhibit irregularities and abnormalities in the position, structure, eruption, and shedding of teeth. The deciduous teeth for instance, may be retained to adult life, coexisting with the permanent teeth.

Nutritional disturbances associated with abnormal buccal conditions are common. The mouth is one of the most important organs of digestion. Mastication of the food is the most essential prelude to the processes which are to follow, and in respect to starchy foods, a considerable proportion of the digestive process should normally occur in the mouth. Thus children with bad teeth have commonly disturbances of other digestive organs, and impaired nutrition, which is of course accentuated by the associated toxemia due to absorption of bacterial products from the mouth.

Coöperation between the dental and medical profession must be had. Both they and the public must be educated to the need by those who already realize it. The dentists must learn that they are workers in one of the great fields of medicine, in which they have to do with matters which may determine the whole future health and usefulness of the individual; and that children instead of being avoided, are to be regarded as their most important patients, because much of their work can be effective only in children.

Parents must be made to appreciate the tremendous importance of conserving the deciduous teeth and of correcting orthodontic defects and deformities early.

The splendid benefaction of Mr. George Eastman of a Dental Dispensary in Rochester, and of the Forsyth Infirmary by Mr. Thomas Forsyth in Boston, are encouraging examples of what may be accomplished for the promotion and establishment of Public Dental Clinics, in general whereever the effort is made to propagate in a practical way, a popular belief in the beneficent character of such services, and where its importance as a prophylactic measure against ill-health is effectively demonstrated. Educating the children in the schools by means of lectures, slides, drills, pamphlets, and a system of thorough examination at frequent intervals, of the mouth and teeth, will, in general, further the progress of Oral Hygiene and Good Health.

The practice of dentistry is a fine art, as long as the dental profession continues to uphold the ideals that have made it great and respected, so long will it continue to grow in usefulness and honor.

OFFICE EXPERIENCES

A DENTIST'S BUSY DAY

A certain dentist occupies a suite of commodious offices, and waits upon the needs of a large and desirable clientele. He recently experienced a day so full of nerve-racking episodes as to be worth recording.

It chanced that on this morning his appointments began at 8 o'clock with a patient who is noted for a tendency to nausea under any conditions requiring work in the mouth. On this occasion it was necessary for him to take full upper and lower impressions and the patient had been cautioned not to eat any breakfast, because of a harrowing remembrance of nausea on a previous occasion, which had interrupted the usual office routine for several hours.

The impression taking began promptly at 8 o'clock and was conducted in a constant battle between the patient's efforts of will not to be nauseated and the frequent, violent and nearly-successful rebellion of the oral tissues. The dentist lent his will power to the support of the patient's will, and after two hours of most strenuous endeavor succeeded in getting the impressions and bite. He dismissed the patient and retired to the laboratory for the solace of a few moments' rest and a cigar in an effort to recuperate sufficient nerve force to serve the next patient.

While reflecting upon the oddities of a dentist's experience, the assistant came rushing to the laboratory door saying "Oh, doctor, I hear the most awful sounds in the reception room. What can be the matter?" They made a hasty trip together to the reception room and found the colored maid of all work flat upon the floor in the throes of an epileptic fit. Fortunately, no patients were in the reception room and they managed to get the girl into the operating room where she shortly recovered. Upon recovery, she had lost all memory of who she was and where she lived, and as no one about the office knew, the question of how to dispose of her became serious. Her address was finally obtained and she was sent home in a cab. One hour had been lost in this experience.

At 11 o'clock he began the work of putting in a gold foil filling in a lower molar, and had adjusted the dam and commenced placing the foil when the patient began to throw her hands about in an uncontrollable

manner and make queer sounds. He immediately asked whether the work was painful, not thinking that it could be so, to which she replied that it was not and he should go ahead. Perceiving from a continuation of the symptoms that the patient was suffering from an attack of hysterics he completed the filling as rapidly as possible, and removed the dam. After a few further manifestations of uncontrollable hysteria the patient quieted down, and apologized saying that she probably suffered as the result of long apprehension of pain from the service.

By this time the dentist's nerves were about tired out, and he wel-

One of "the three youngsters"

comed the lunch hour as an opportunity for getting out doors and restoring his nervous balance.

The first two hours of the afternoon were taken up by three youngsters whom the dentist described with vivid detail and with vehemence as "hellish." Perhaps part of the hellishness was due to his own nervous condition, but that made it none the less wearing upon him.

They were followed by a woman patient who was exasperatingly talkative. She insisted upon telling her entire family history from the time when her father fought under Lee until her nerves were shattered at the birth of her last child. But little was really accomplished for her, but she left the dentist more fatigued than he would have been by an hour's hard work.

It was now past the middle of the afternoon, and the dentist was

looking longingly at the clock wishing for the hour of five, when he could slip down to the tennis club for a few moments and forget all his troubles.

He finished the last patient a few minutes earlier than he anticipated, when in came two ladies, one of whom said she had a loose tooth and asked to have it extracted. The dentist complied, injected two or three drops of a local anesthetic in the tissues about the end of the roots and extracted the tooth without pain. The patient was so delighted that she requested to have another extracted. The second was extracted in like manner and the patient was loud in her praise of the work. She

She insisted upon telling her entire family history

said she felt fine, and went over to the mirror to arrange her hair, when she complained of feeling dizzy. She passed rapidly into a stage of unconsciousness with complete muscular relaxation, and it required the efforts of the dentist, his assistant and a physician for more than half an hour to restore her to consciousness. By the time she was out of the office it was nearly six o'clock, it was too late and dark for the game of tennis, and the dentist started homeward physically and mentally exhausted.

"The difference between the clerk who spends all of his salary and the clerk who saves part of it, is the difference—in ten years—between the owner of a business and the man out of a job."—John Wanamaker —*Healthy Home.*

"IN NO HURRY FOR THEIR MONEY"

The following letter from a patient to a physician exhibits the feeling doubtless entertained by many patients that professional men are in no special hurry for their money. They may think that they make money so easily or so much of it that it makes no difference when it comes in. The second letter below shows the attorney's feeling upon the subject when he made an effort to collect the account. It is interesting to note that the attorney reported two days later that a check for the entire amount had been received. This merely indicates that most people are quite as willing to pay professional bills as other bills, if they find that it is unavoidable.—EDITOR.

(Letter from Lady patient to Attorney upon request for immediate payment of the bill.)

GENTLEMEN:

I am really very much surprised at the tone of your letter.

It is true that Doctor Blank rendered professional services for me four months ago, but several others did the same. I saw no reason for settling his bill first, and I am not ready to settle all of them just yet. As letter writing is rather difficult for me I spare myself whenever possible. It is not a matter of whether we are able to pay these bills. I have never found doctors in such a hurry for the settlement of bills. I have usually had to make the request more than once that they please send me their bills. I have been waiting until I am entirely out of the doctor's hands to settle my professional bills.

Yours respectfully,

MRS. BLANK.

(Letter from Attorney to Physician)

DEAR DOCTOR:

This morning's mail brought us a letter from the lady for whom the service was rendered. This letter is a gem. In short, it is unlimited gall and nerve; she states she is in no hurry to pay her professional bills, and she is waiting to see how her knee behaves. She does not give any definite date when she is going to pay and seems to think you can wait her good pleasure. We wrote her that her letter was anything but satisfactory, and that if a substantial amount was not received in a reasonable number of days and satisfactory arrangements made for the balance, we should start proceedings to collect.

O. E.

THOUGHT SHE WAS "CHEATED WRIGHT"

Doctor Blank made a partial plate for a patient and, upon presentation of his bill received the letter printed below. He thinks it might be of interest to other readers of this magazine.

I wrote him for further particulars, and received the second letter. It touches so closely an experience common to many offices that it is here given with omission of names and place.—EDITOR.

DOCTOR:

I have already received to bills from you, which I delayed in paying. It isn't that I forgot to pay you, but my parents thought it over, and said they think, that you cheated me wright, with my set of teeth. I can't understand why you charge me that full amount for my plate, where other places I can get a whole set of teeth for that price. I went to Doctor X. and asked him what he would charge me for that set of teeth, and he said he would only charge me $5.00, Because it was only $\frac{1}{3}$ of the set. You can't tell me that you have to buy the whole set of teeth, in order to pick out my three. I am awful undesighted about this business. I would like to have my plate made about next month, but I want a different bargain for my plate or else I cannot pay that amount. And I will not pay the balance, when I know I am paying to much.

I would like to have you send me a note of two or more lines and let me know what your idea is about this. And if you think this matter over, I think you will know that I have wright.

I am willing to use people honest if they use me honest. And I don't think its honest, when a business man trys to get all what he can, from a hard earned labor.

Would like to hear from you by next week Friday. My address is Miss Jones,

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DEAR DOCTOR:

I did not expect you to be interested in the —— case other than her letter which expresses the line of thought of many people of her grade of mentality.

I do not remember whether or not price was discussed previous to making her plate, as I do not quote prices unless questioned.

Her plate was a partial of three teeth. When she received a bill for $15.00 she wrote the letter I forwarded to you.

I was first mad then rather amused. I thought of several cutting answers but concluded that they would go over her head any way, so simply placed account in collector's hand and she paid. Since then I've reset the same plate for her without any trouble.

You will note from her letter that Doctor X. told her the plate should be $\frac{1}{3}$ cost of full 1 x 14 because there were only three teeth, hence $5.00.

A Miss T—— called here not long ago, and needed a crown and one small silver filling. She kicked because I charged one dollar for the filling and paid the eight dollars for the crown without a word because it was gold.

She told me I made my money easier than she did and didn't think it right.

Let me tell you another one. An Englishman who has a store on my street, came in with a cracked plate which he wanted repaired. He is the stingiest man I ever saw. He smokes a pipe twice a day and I presume he counts out 365 matches the first of each January for the succeeding year. When he explained his difficulty to me I was suddenly overcome by a desire to sell him a Trubyte plate.

I explained the advantages of these teeth and showed him my cabinet and when I told him I would have to charge him seven dollars more than for the regular stock plate he went up in the air.

When he came down I went after him for I had only a repair to lose. I told him if I were in his place I would not deny my body a good restoration even if I had to wear a suit of blue the rest of my life.

I knew I had him coming when I said, "Over in England they have recognized the excellence of Trubyte and have ordered six million sets from New York City."

Without further words I sat him down and took an impression and told him to call next day and see teeth in his mouth. When he came, I showed him the plate and as much of himself as I could get on a small mirror and dismissed him never asking which plate he would have.

Well, he is wearing a Trubyte restoration and is tickled to death. I believe I could sell him a Curtiss Aero-Plane.

I couldn't write long enough to tell you how much I owe you for your articles in the DIGEST. Anyhow, I bet you know if you have a line on "the devil-may-care way" so many offices are conducted. I used to make lots of money every month in the year until I balanced my books at the end of the year, when I invariably was on the wrong side of the ledger.

GEORGIA.

PREVENTING THE CRACKING AND BLEEDING OF CHAPPED LIPS.—When a patient presents with chapped lips, which would crack and bleed if stretched, the lips are coated with resinol ointment. The lips will then be soft and pliable, and will stretch without cracking or bleeding.—S. M. MYERS (*Texas Dental Journal*).

DIETETICS AND HEALTH

THE DENTIST WHO CAME BACK

By Watson W. Eldridge, Jr., M.D., New York.

A dentist has just left the office who will make a most excellent subject for this month's story, and whose history may not only adorn a tale, but point a moral.

He has a good strong body and a good mind. He is apparently a hustler both physically and mentally. He works hard in the office and when freedom from the office can be gained, he plays hard at out-of-door sports. He appears to have no vices which affect his bodily welfare.

Under these conditions it might be expected that he would be a model of physical and mental health and efficiency, and indeed for many years, and until a year or two ago, he appeared such. He then became aware of occasional periods of physical depression, without visible cause, and perceived after a time that they occurred more frequently and were more severe. He felt an unjustified fatigue. He disliked to begin work, and felt unequal to completing it. He found himself taking an occasional day away from the office when he desired neither physical nor mental activity, after his former manner, but preferred relaxation, which, however, did not appear greatly to rest him.

Exhaustive examination established the presence of an expensive auto-intoxication, of long standing, but which the body was able to throw off from time to time, and which was able to master the body only occasionally, but was gradually getting an upper hand.

Now this dentist was, in the same sense of the word, a good liver; when he had finished a hard and creditable day's work, he looked forward with pleasure to the evening meal with his family or friends. When he was particularly tired or hungry nothing so delighted his eye and appealed to his taste as a porterhouse steak about an inch and a half thick, medium broiled, with potatoes, a vegetable, a salad and dessert.

He was not what might be called an excessive eater, and if he had been occupied during all of the days in some outdoor work which could oxidize his intake, no ill effects would probably ever have attended his

method of living. But his big body demanded things which the amount and kind of his work was not sufficient to oxidize, and the vital force of his digestive tract gradually failed because of the demands he unconsciously put upon it.

When the cause of his trouble was pointed out, he pooh-poohed the idea. He knew that he had always been temperate both in the amount of his eating, and in the abstinence from the use of alcoholic liquors. Being at that time in the midst of a period of physical depression, he readily agreed to a reasonable modification of the diet, though scouting the idea that benefit could be derived from so simple and apparently unnecessary a change.

He was persuaded to reduce the amount of his meat (proteid intake) to a small portion of meat or not more than two eggs once daily, to substitute bran or whole wheat bread for white bread, to make the rest of his meal on fruit, cereals, or vegetables to his liking, and always to leave the table before he had quite satisfied his hunger.

He dropped in in passing to tell me that he felt, after his English method of expression "quite ripping, don't you know" and had for more than two months past. I have been thinking since he went out that it is a good thing my office door opens outward, because he is so big and husky and so full now of vigour and bounce that otherwise he might not have waited to open it but might have taken it right along with him.

Only a little change, wasn't it?

But it worked miracles.

125 W. 58TH ST.

A NOT UNCOMMON CASE

This letter was received in reply to the offer of this magazine to place the services of a specialist in gastro-enterology at the service of its subscribers.

The physician has written this subscriber suggesting that he undergo examination by some local practitioner for heart and kidney lesions and an examination chart has been sent, to be filled in, that further information may be given.—EDITOR.

I want to present my own case for your consideration and advice.

I am 48 years of age, have practised dentistry continuously for 26 years and have never lost as much as three days at one time from sickness —but I have been constipated all my life and am getting more so. I think I am physically sound but I suffer quite a good deal with headache, backache, and often have a general feeling of lassitude, and the least

physical exertion puts me completely out of breath. Am sometimes nervous, and sometimes suffer with rheumatism in my shoulders. I am 5 feet 9 inches tall and weigh about 175 lbs. I do not look as old as I really am, nor do I feel that I am aging, but I notice, particularly within this last year, that the skin of my face is yellowish, does not have the healthy glow it used to have, and what worries me more, the muscular tissue of face and neck is getting flabby and soft; my eyesight has failed rapidly, too, within the last year, and I find I cannot concentrate my thoughts as much as formerly. Now Doctor, if in your prescription for my case dieting is included, I shall appreciate it much if instead of saying eat foods containing carbohydrates, hydrocarbon, etc., you will state specifically just what foods under the different headings, I should eat, for since there are scores of articles of food that could be classed under each, I would not know which to select.

NEW YORK

FOCAL INFECTIONS

For many years it was thought that we were well acquainted with bacteria and their vagaries, but recently we have discovered that there remains much to be learned. Of the various activities of bacteria the most interesting at present is that of the so-called focal infection. By this is meant a small, more or less quiescent point of disease which, although it causes no local disturbance, gives rise to symptoms elsewhere.

Probably the most important of these manifestations is the involvement of the various joints of the body.

At present the capable physician is no longer content to give antipyretics, in expectation of a miraculous cure. If a patient now gives a history of chronic and painful joints, the first thought of his physician should be focal infection. To determine the presence or absence of such a condition is not always an easy task, and outside aid, particularly the Röntgen ray, may have to be called upon. There may be a chronic gonorrhea, the tonsils may be diseased or, what is very common, there may be infection at the roots of the teeth. This last is a frequent condition and may be present without local indications. It is also interesting to note that many inflammatory lesions of the eye are directly referable to dental infections. This has long been recognized by the laity, but the idea was considered to be mere superstition by the medical high priests.

After removal of the focal infection the patient's rapid recovery, in many instances, is little short of marvelous. In most cases no further treatment seems to be necessary, the joints cease to be painful, and the convalescent goes on his way rejoicing.—*New York Medical Journal.*

IT'S BETTER TO KNOW THAN TO GUESS

Is it hard to set fees for each patient in a sensible, practical way?
Is it irking to conquer accounting, and settle what each one should pay?
Then think, if you're likely to wonder: "Should charges be greater or less?"
That, if you would render true service, it's better to know than to guess.

Whatever relief you've afforded, whatever the labor involved,
Whatever the task that confronts you, and the problems it brings to be solved
You will find the results disappointing, not worthy, in fact, of the wait,
If you base your accounts upon guesswork, and find out your error too late.

It's part of intelligent service to keep an intelligent score,
To be sure of your labor's true value, and not just to guess any more.
The only fees honest to patients are those that you know to possess
Reward for to-day and the future. It's better to know than to guess.

DENTAL ECONOMICS

MORE ABOUT THE OLD AGE FUND

By A. H.

As the author of "Saving for the Rainy Day and Old Age Fund" in the August issue of the DIGEST, I feel that I must answer some of the remarks by the editor and especially those of Thomas M. Weed in the October DIGEST, pages 653–655.

I agree with both of them in some respects and disagree very much in others.

The editor says, "I should prefer to leave my wife $10,000 in investments netting her $500 per year, than to leave her $10,000 in a home and no income to support it."

I agree with the editor. I feel that no man should own a $10,000 home unless he is able to leave his widow an income safely invested to yield her at least $1,000 a year to support such a home.

I advise "A modest home and within one's means." In a country town, in most any state, such a home can be built or purchased for $3,000 to $5,000; in larger cities the location will decide the price. Suppose, Mr. Editor, the widow was left with a $5,000 home paid for and $5,000 safely invested at 5 per cent. and the home was like most houses of this kind with one or two rooms saved as guests' rooms. In most any place of any size at all, there are always school teachers and principals and professors and often a young man or a man and his wife, who have business in the town for a short while and need just such rooms.

These furnished rooms could be rented with fine returns and in our town, for instance, such renting brings more money than renting the house would, and is done by some very good and respected people.

I have in mind a widow who was left with a home worth about $6,000 and very little money. She and her two small children lived in some of the smaller rooms and rented the better rooms. She kept a good clean house and gave her roomers the use of her library and parlor. By doing this she commanded a big price for her rooms and kept some of her roomers for years. She made enough this way to keep herself and her children in comfort and to send the latter to college.

A $10,000 home with large rooms and fancy woodwork is expensive to maintain and heat and is a mighty poor thing to leave a widow, unless you can leave her a big income to support it when the provider is gone.

Again, should the widow want to sell her home, it is much easier to sell a $3,000 to $5,000 home than a $10,000 one.

My friend Weed says, "I have painted a pretty blue picture, but by looking at poor art first we are able to appreciate good art."

I don't see his artist view at all, he paints the house blue and his bank

"By this means she commanded a big price for her rooms"

stock too rosy. His statistical advice on money depreciating $4 a year in purchasing power is too depressing and pessimistic. I have never seen any bankers worrying about it. Be like "Pollyana," thankful for something. The Fords are getting cheaper every year.

I agree with him that houses often lose in value but modest homes in any live town can easily be sold and often at an advanced figure.

Some of the insurance cases he quotes are mortgages on rich men's homes costing from $30,000 to $300,000 and up. I believe that most any home costing over $10,000 will depreciate in value and the builder can seldom realize the money he put in it.

My own modest home has sheltered me for seven years and I have been offered from $2,000 to $4,000 more than I paid for it. It is not for sale, as I want it myself. I bought it from a family leaving town and I bought it cheaper than I could have built it. In most cases it is cheaper to buy than to build.

It is a very difficult matter to sell any home of the $10,000 class and up, and get back the money that you put in it. This is so because any person having that much money to spend for a home wants it built according to his idea of what a home should be. Few dentists can afford to live in any such house and the $3,000 to $6,000 is more to our liking, especially if we want a nest egg for old age.

The twenty years endowment is also painted too blue. Many people will save for a life insurance policy that can't or won't save for anything else. I have seen many a family kept from the poorhouse by life insurance on the bread winner.

If it is such a poor investment why are some of our biggest financiers insured, in some cases for millions? Insurance may not be a wonderful investment but it is surely a great protection and I think the modern policies give you a lot for your money. Again, my friend Weed suggested that the dentist study finance. I agree that dentists should study finance more and I would advise every dentist who has a few dollars to invest in bonds or stocks to subscribe to *Leslie's Illustrated Weekly* and study the financial column that has been edited by "Jasper" for over 25 years. "Jasper" will gladly give advice to those who need it. The *American Magazine* is also a good magazine for every dentist to read, as it has many articles on helpful subjects. My friend also mistakes these figures as my own. I am glad to say they are not but it was such figuring that put me "on my feet" and the article was written with the idea of helping some other dentist on to his feet.

Dentistry is full of men making big money with but poor ideas what to do with it and I wish more readers would discuss financial subjects.

A dentist knows how to fill a tooth or make a plate but the average dentist doesn't know how or where to safely invest his money and I should be glad to see the DIGEST encourage such subjects.

Any banker or broker will tell you that the Standard Oil stocks are a fine purchase but their price is so high that a dentist with a few thousand could buy only a few shares and he would then have all his eggs in one basket.

The same refers to bank stocks that my friend advises so strongly. Good bank stocks are hard to get and those in the larger cities are often listed for several thousand dollars a share and none for sale. If you pur-

chase stock in a new bank, you most likely will not get any dividends for many years.

I think the proper advice in this respect would be to interest dentists in the partial payment plan adopted by many of our large and good brokerage houses in New York City and also get them interested in the baby bonds selling at $100 a bond. A dentist who has a few hundred dollars or so could buy 5 baby bonds for $500 and divide the $500 up in a few

"He told me where I could buy ten shares of stock in his bank"

shares of any of the "seasoned dividend payers," paying the balance on the "partial payment plan."

Some of the "seasoned dividend payers" that I have bought by the advice of my broker are the following—Railroads—Penna., Atchison, Southern Pacific, Northern Pacific, Union Pacific, Norfolk and Western, Lehigh Valley, Delaware and Hudson. Industrials—U. S. Steel Pfd., American Sugar Pfd., American Telegraph and Telephone, National Lead Pfd., Swift & Co., American Smelting Pfd., Sears, Roebuck Pfd., and Woolworth Pfd.

There is no way to get rich quick; take slow methods and you will get there quicker. My friend Weed doesn't like "Savings Banks and 4 per cent." A friend of mine, a railroad builder leaving over a million behind stipulated in his will that, $20,000 must remain at all times in "Sav-

ings Bank" for each of his sons and said "while all my other investments might fail or diminish the $20,000 was absolutely sure."

Money means power. Get all you can and invest it safely and you will find the more you get the greater will be the opportunities presented to you.

Recently a bank president came to me and told me where I could buy ten shares of stock in his bank. He advised me to buy them and he said he would see that I became a director in his bank.

It was a fine opportunity, but with the stock selling at $650 a share it could not be grasped by a man with only a few thousand dollars nor would it be sensible to put all his money in one investment.

The DIGEST has helped many dentists to increase their income, now let it help dentists to safely invest their money so it will bring good returns now and be safely invested for the future. The more you study finance, the harder you will find it to get big returns and have your money safely invested, and while I own both bonds and stocks I still feel that my "Savings Banks" at 4 per cent. are still good and safe. Like an old friend I have no intentions of shaking them. As the modern slogan goes, "Safety First" applies to investments and is a good one to bear in mind.

SUGGESTIONS REGARDING INTERCHANGE OF LICENSES

GEORGE B. SNOW, D.D.S., LONG BEACH, CALIFORNIA

The interchange of licenses as regards graduates entering into practice cannot be allowed in justice to the Dental Schools of the different states. No one knows at the time of graduation how the graduate will turn out. He should be kept at home long enough for him to show what is in him, and to make a name for himself among his fellow practitioners in his own state. And then, the fact of his possessing a license is not sufficient. He should be vouched for as having been in reputable practice by the members of one or more Dental Societies. There are some licensees who are not in reputable practice, and these should be excluded from passing freely from one state to another.

WHAT IS "BEING SUCCESSFUL"?

By J. F. Conover, D.D.S., Calman, Iowa

SECOND PAPER

We draw another hat. Ah, this is better. On this tag we read, Success. Success! that's the thing we all are seeking but sometimes we do not know her when we meet her. Ofttimes we salute a stranger. I am not sure that I know the lady but I have a notion that I know what she looks like. Some have said that success is the attainment of an ideal; others, that it is the amassing of a fortune; or the achievement of fame; or the doing of what one sets out to do. Suppose you get started in the wrong direction; perseverance might land you in the pen; I have a notion that it is none of these. True success brings contentment. Does the attainment of an ideal bring contentment? That depends entirely on the ideal. Does money bring contentment? Watch the men who have it. They work like slaves to get it, still harder to keep it, and can't sleep nights for fear they will lose it. How about fame? The emptiest bubble ever blown. Ask Napoleon at St. Helena. Ask Benedict Arnold as they wrapped the American flag about his poor wasted body. And it might not be amiss to interrogate Teddy.

What is it then that we must possess to be successful? Again I do not know, but I have another notion. It seems to me that the basis of success is health using that word in its broadest sense. Health may be divided into three departments if you please. 1st, moral health, which manifests itself in unselfish service to mankind. 2nd, mental health, which manifests itself in the discovering of materials and methods necessary to this service, and 3rd, physical health, which manifests itself in untiring energy for the performance of service. The discussion of these three states of health must be very brief (for the sake of your health).

As previously stated, morality is conformity to conscience. Moral health then is the result of a good conscience, a true conception of the essentials of man's relation to man. That this condition may obtain, the individual must be well born, a debt the world owes to every child coming into it but one which in so many cases is never paid. He must be given a proper environment—a good home. Every child is entitled to a good home, yet how many there are who never know the meaning of the term. He must have a common interest with his fellows. That is friendship. Robert Louis Stevenson said that no man is worthless who has a friend. Will either fame or money get friends? Verily NO. The only way to have friends is to be a friend. Be a friend to the whole wide world; give

to it the best service at your command; live so that you will leave the world better than you found it. That is true success and the striving for it will bring contentment.

The individual must receive an adequate education. This takes us into the realm of mental health which is ministered to by our schools, general and special. Nothing need be said to emphasize the necessity of intelligence relating to any and all of life's activities. Lastly, we come to physical health. No matter how complete the individual's mental and moral equipments may be if he has not the physical ability to apply them in the form of activity he will accomplish but little.

Now, to bring this subject to a more intimate and personal relationship. Did it ever occur to you that to care for your own physical welfare is as much a part of your professional work as is the doing of operative or prosthetic work? You can best conserve the health of others by first conserving your own. The basis of human existence is food. I used to think that I knew something about the subject of proper food but a cantankerous stomach has to a great degree dispelled that illusion. Again I have a few notions. We often hear of good boys and bad boys but all boys are good if given a chance, the so-called bad boy being a good one with proper surroundings. So it is with foods. All foods are good but they go wrong when they get in bad company. Instead of foods not agreeing with us, as we say, the fact is they do not agree with each other. Foods are merely chemicals and you know what the results are of combining incompatibles. In like manner, when we throw a lot of unfriendly foods together in our stomachs they quarrel and throw the furniture at each other. The eating of foods that are harmonious chemically produces harmony in the digestive tract and harmony is health. Back to nature is a popular health slogan of to-day. Just how much virtue there is in this stuff I do not know. Indeed, is there any such thing as getting back to nature? Isn't it getting ahead to nature? Are we sub-natural or super-natural? One thing I think I do know, and that is that fresh air, pure water, shimmering sunshine, and harmonious sights and sounds are necessary to good health. Not physical health only but to mental and moral as well. And I further know that these blessings are to be found in Nature's great out of doors.

"The department of health estimated that in 1915 the actual cost to the citizens of Chicago of three contagious diseases—measles, diphtheria and scarlet fever—among children was more than six and one half million dollars. Nor does that take into consideration the number of deaths. All of these diseases are preventable. The germs were communicated mostly by bad teeth."—*Selected.*

BRAN GEMS

This letter deals with a formula for bran gems, which a good many people are substituting for bread made with white flour, with decided physical benefit. Doctor Edwards did not like the formula as given in the October number of the DENTAL DIGEST, and after having tried different modifications, he submits the following:

Experience teaches me that if raisins and nut meats are liberally added to these gems, and baked in, they are made very much more enjoyable as articles of diet.—EDITOR.

LACEYVILLE, PA.
Nov. 23, '16.

DEAR DOCTOR CLAPP:

The reason I have not written before is because I have been experimenting with different formulas for the bran gems. I have used sweet milk, sour milk and butter milk. Have added granulated corn meal, also oat flake, to the mixture, and noted results. By using both, there seems to be too much of a mixture, and the distinct taste of each ingredient is lost. If one is fond of corn meal, a cup of this may be substituted for one of the whole wheat, making a good, wholesome, cold weather formula. If sour milk or butter milk is used, more soda and less baking powder should be used. That is, in dealing it out by the teaspoonful.

The following formula I like best of any:

1 Heaping Cup Bran.
3½ Cups Whole Wheat Flour.
½ Cup Molasses.
2½ Cups Sour Milk (with cream).
1 Teaspoonful Salt.
1 Teaspoonful Baking Soda.
1 Teaspoonful Baking Powder.

Bake 20 minutes in a hot oven at about 300 degrees.

Fraternally yours,
GEO. B. EDWARDS.

December 10, '16.

EDITOR DENTAL DIGEST:

Will you please advise me where I can obtain detailed instructions regarding finger massage of the gums and teeth or any process by which the mouth is kept clean without the use of a tooth brush? J. B. F.

WHY PATIENTS THINK FIRST OF THE PRICE

MY DEAR JIM:

So you think what I have written you about better quality of service at better fees is all fol-de-rol, so far as you are concerned, do you? You are willing to admit that Drs. A—, B— and C— render fine service to appreciative patients and are well paid for it, but maintain that you can't do it.

You say that your patients think first of price and of price in the mid dle and of price at the end. You say the only part of your talk they are interested in is the price you quote and that you could do as well to merely make signs about the rest of it and then open your mouth and say "seventy-five cents."

Why shouldn't your patients think first and last of price? That's about all you talked about when you were bidding on Mrs. Dutton's work; you didn't bid on work, you merely bid on price. You said something like this: "I can crown those teeth and put a bridge in there for $30, or I can take the teeth out and put a plate in for $15. In response to her inquiries you said that the bridge would be more comfortable and probably more efficient. You told her a few other facts when she asked, but the moment you were left to talk of your own accord, you talked about price. Your mind flew back to the money as a needle does to a magnet. It was the hub, spokes and rim of all you had to say. When she went out she knew a lot about price, but all else that she had learned she had extracted from you by the force of her own wit.

Then in came a man whose name I don't remember. He had been to see Doctor Opposite, across the street, and get his bid on some repairs to his mouth. You went through the same plan as with Mrs. Dutton. You talked price. It seems that Doctor Opposite was trying to get a decent fee for decent work. You didn't help either him or yourself to get that fee. I don't recall hearing you say anything that you might have said about possibilities or service but you said a great deal about price. When

the man showed some signs of being willing to pay a fair fee, you mentioned higher priced work, but always in terms of price.

Why shouldn't people who come to your office think first of the price, when you do? Why shouldn't they think last of it, when your last word to them is "it is worth the money"? Why shouldn't they think of

"When she went out she knew a lot about price"

price all through the talk when you are so busy sprinkling prices through it that there is room for little else, and every treatment, every filling, every plate, every crown is described almost entirely in terms of price?

Where are they to learn something about the service they need and its value to their health, if not from you? The butcher, the baker and the electric-light maker will teach them about meats and bread and lights, but not about dentistry. The preacher will tell them about the here and

the hereafter, but not about their teeth. The physician will tell them about their bodies in general but not much about their mouths. And so on down the line, every one who has either material or service to sell is teaching them about the quality and benefits of his service, and then attaching the price as a necessary but not super-important consideration.

"He knew how to land me while the other didn't"

But you are talking price from the beginning and little else. If you aren't careful, you may bid farewell to this world in terms of price. You will have gotten out of the habit of talking anything else.

Why don't you give your patients a chance to think about service, about the health of their bodies as affected by conditions in their mouths, and about the possibilities of benefit by proper repair? Why don't you seek to develop their knowledge of dentistry as a science and not as a

bargain counter? Why don't you follow the leading of all the successful salesmen of service and create pictures of benefits in their minds before you drag in the subject of cost as a damper on their hopes?

Only this afternoon I had an excellent illustration of how this can be done. You know I have never carried a stock of teeth in the office because there is a dental depot in this building and I figured it was cheaper to let them carry it and buy as I wanted. Salesmen have often suggested office stocks, but I have always declined.

Well, this afternoon I bought an office stock and a big one and it took me two hours after the salesman had gone to find out how it happened. He was no more gentlemanly than the others had been and no better talker so far as mere words were concerned, but he knew how to land me, while the others didn't. And the more I think over how he did it, the more readily I take my hat off to him.

He didn't talk about an office stock of teeth or the amount of investment, but he said that he wanted to show me how to improve my service, to effect economies in working time and to save about 30 per cent. on certain forms of office expense. Well, every one of these things interested me, so I was ready to give him a few minutes. He made good on every statement. He illustrated his points in a way I couldn't get around. He called up the two girls, asked them to keep their mouths closed and asked me what forms of teeth or facings they should have to produce the most harmonious effects in full anterior restorations. I couldn't answer right away, so he showed me in half a dozen sentences. Then he asked me how to order those teeth from the depot so as to get just what I wanted, and I wasn't very sure, because my ordering hasn't always been successful. He showed me how to select and order in less than half the time it had heretofore required, and do so much more accurately.

He found out what kinds of teeth I use and about the quantities of each, and showed me how to save 30 per cent. of my present purchase price and in five minutes he had my order for more teeth than I ever expected to own at one time in my life. And I want them, too. The more I think of it the more I want them and the methods and advantages and savings. And I don't in the least begrudge the $100 I'm going to pay, because I'm going to save $30 on the actual cost, and as nearly as I can figure about $200 in time and bother while I'm using them. I wish I could invest all my savings at the same profitable rate.

When I think of all the salesmen who in times past have asked me "Doctor, don't you want to buy $100 worth of teeth and save some money?" I think of you and your way of selling a $15 plate with the best teeth and rubber, and a $12 plate with the second best teeth and rubber and perhaps a $5 plate with the fifth best teeth and rubber and I

don't wonder that a lot of people go away unsuited and that those whom you serve don't get any great part of what they should.

And when I think of that chap who went out a few hours ago with my signature on the order blank and with me eager for early shipment of the goods, and $100 in my bank waiting for the chance to go to his House, I think of all the people you might instruct in the same way.

I don't think you have any right to measure the hopes and desires of your patients by your own little yard stick of hurried up work and unprofitable fees. I don't think you have any right to accuse them of thinking of fees first when that seems to be what you have thought most of and talked most to them about. I don't think you have any right to say that's all they care about until you have taught them to care about something else and at least given them a fair chance.

Yes, I know it will be hard work but that is your fault and not theirs. They don't teach you fees. You and Doctor Opposite taught them to think first about the price, and that they could play you off one against the other, and get the price down and down and down. And you and Doctor Opposite never joined hands to show them that however fast the money price went down the quality went down faster and that the cost in teeth and health went up faster than the price in dollars went down.

You are face to face with conditions of your own making and the making of other dentists. You've got to pay the penalty of your own short sightedness in the past.

But first of all, and greatest of all, and probably hardest of all you've got to learn to see something else in dental service than the dollar mark. And you've got to learn to talk in other terms than dollars and fractions thereof. And if your people keep bringing up the price, you've got to remember that this is what you and Doctor Opposite taught them to do and you must work with patience until you outlive your own discreditable past.

Money is necessary in dentistry, because you've got to live, perhaps a long time and because it costs a good deal to render good service. Food is necessary in life, but we don't need to think and talk about it constantly; to express our aspirations and regrets in terms of bread and butter.

You're right about the facts as to how your patients think but wrong as to the reason why they think that way. The trouble began in you and Doctor Opposite and its correction must begin in you and Doctor Opposite.

And like every other sinner you've got to pay the present penalty of your wrong doing, with the expectation of salvation in time to come.

Bill

PRACTICAL HINTS

A HARD CEMENT.—I find that Caulk's Liquid mixed with Ames Cement makes the hardest cement I ever saw, and it sets very quickly.—J. J. JONES, D.D.S., Scottsbluff, Nebr.

A KEY HOLE SAW FOR THE BENCH.—I find a key hole saw is a very useful tool for the bench, to saw the excess plaster off your models, and also for removing model from the articulator. It saves much knife work and it is not so liable to break the model.

FINISHING AMALGAM FILLINGS.—In finishing amalgam fillings, some teachers recommend drying off to a hard surface by pressure, with either bibulous paper or tin foil. Both of these practices, to my mind, should be strongly condemned, for the reason that the excluded mercury contains a certain proportion of the combined metals, and also because, when tin foil is employed, the correct proportions of silver and tin are altered so as to result in expansion or contraction of the amalgam. My practise, therefore, is to have my assistant mix a certain proportion of the amalgam to almost a powder, which I work into the filling when nearly completed, thereby securing a hard filling with a more equable proportion of the constituents of the amalgam. I believe also in making, in nearly all cases, the amalgam fillings practically into inlays by burnishing the amalgam into the moist cement, thereby producing a much better filling.—W. N. SHORT—*Commonwealth Dental Review. Dental Cosmos.*

THE JUSTIFICATION OF HOLLOW INLAYS.—There are four very good reasons why the internal part of the wax pattern for a cast gold inlay should be cupped out: (1) In vital teeth, to allow for a considerable thickness of cement as an insulation between the inlay and that part of the cavity directly over the pulp; (2) by diminishing the bulk of metal, the shrinkage is reduced; (3) by forming a retention box in the inlay, added retention is insured; (4) material is saved which otherwise is needlessly wasted.

A very convenient method of hollowing out the wax pattern is to

hold it by the sprue wire, and with a sharp rose bur of medium size in the engine to bur away the superfluous wax. If Taggart's wax is used, it may be burred out so that light may be seen through it, and still the inlay be sufficiently thick. This method is also applicable to the cutting out of the inner portion of the wax when cusps are cast on shell crowns, thus securing an even thickness over the entire occlusal surface. —E. L. HERING—*Practical Dental Journal. Dental Cosmos.*

PREPARATION OF SOFT TISSUES BEFORE EXTRACTION WITH LOCAL ANESTHETICS.—When treating the gums with solution of iodin previous to injecting for extraction, always apply well round the gingival margin; this prevents any septic matter there being forced into the tissues when applying the forceps.—A. G. SALISBURY, Takaka, N. Z.—*The Dental Review.*

GRINDING THE CUSP TO PREVENT THE LODGMENT OF FOOD.—In some cases we will find that fibrous food will wedge between teeth even where the contact point is good. In these cases take a bite in modeling compound and pour a model. It will usually be found that the opposing cusp impinges in a sharp wedge-shape so as to spring the teeth apart at each occlusion. The remedy is to grind the sharp cusp to flatten it somewhat, which will usually bring instant relief.—*Ed.—The Dental Review.*

TO CONSTRUCT A VULCANITE PLATE WHEN YOU'VE BEEN GIVEN THE WRONG BITE.—When you have constructed a vulcanite plate, which has the appearance of meeting all requirements, especially a fine fit, and find out that you have been given the wrong bite, try this: In preference to taking new impression from the mouth, replace these pieces to their exact position and stick there with sticky wax; oil plate on palatal surface and pour up with plaster and let thoroughly harden and then remove pieces sawed loose and carefully work rest of plate off and you have a model ready to construct a base plate over and are assured of obtaining again a perfect fit. If there are buccal and labial undercuts, take your mechanical saw and saw straight through above the necks of the teeth from buccal to palatal surfaces of the plate, removing buccal and labial walls in sections where there are undercuts.

[Another way to make this correction is to place a small amount of beeswax in molar and bicuspid region, having patient close to establish correct bite, then carefully fill plate with plaster, preferably Spence's, and after cast is hard, remove teeth by heating each one separately and prying off with pointed instrument. Now trim rubber down with mechanical

saw, coarse sand paper or rubber bur. Reset the teeth in wax, flask and vulcanize onto the rubber base plate remaining. If you think advisable to try in before vulcanizing, just cut and break plaster cast out of plate, repouring for flasking.—V. C. S.]

An Aid in the Making of Large Plumpers.—In January, 1916, *Cosmos*, p. 121, F. H. B. suggests that in making large plumpers a piece of old vulcanite shaped to fill the space in the investment and wrapped in a hot rubber sheet will prevent porosity.

A much better method consists in making a tube of vulcanizable rubber about one inch long, of the thickness of a lead pencil, putting a drop of water inside, and closing the ends of the tube securely; this is placed in the investment, and a little rubber packed around it. This will insure a hollow plumper, much lighter than a solid one, and free from porosity.—E. J. T.—*The Dental Cosmos.*

QUESTIONS AND ANSWERS

Question.—My dental engine belt gave me great trouble in slipping consequently could not get speed out of it and in grinding down a piece of bridgework it would stop; settled trouble by putting a little piece of beeswax against motor pully; results fine. In August number Dr. S. Herder of Mt. Vernon, N. Y., tells how he uses an old piece of rubber for mixing his amalgam. If he used rubber fingers I think he would find it easier; then he tells how he washed his filling with water. What does he do with the water in his amalgam? Squeezing the mercury out does not remove the water.—W. J. H.

Answer.—I think that Dr. Herder is wrong in his use of water in amalgam. Your use of beeswax on motor pulley to prevent slipping is a good idea and will do the work, though I believe a little unvulcanized rubber in bottom of pulley groove will do the same work without gumming the cord to catch dust and rub off on a fellow's sleeve, etc.—V. C. S.

Question.—Would very much appreciate through columns of Digest or direct from any dentist any information as to the best manner of inserting dentures in wholly edentulous mouth of lady patient who, as a result of salivation at an early age, is left with the upper mouth on right side from position of second bicuspid to second molar inclusive with membranes on buccal surface attached to and extending over ridge as far as lingual surface, and on left side as far as from second bicuspid to first molar inclusive. These muscles very firm and unyielding when mouth is opened wide enough to insert impression material, balance of ridge very narrow, low and hard, the whole of palatal surface about as hard as a piece

of lignum vitae. Inferior ridge at about third molar position can have plate extend over ridge about same as average mouth with extremely low narrow ridge. Then from second molar location the muscle is attached to ridge over to lingual surface as far forward as mesial surface of right cuspid. Then ridge is normal and about size of piece of orange wood split in half (and about as firm and unyielding) to about position of mesial side of left cuspid where muscle is again attached (as on right side) for as far distally as mesial surface of first molar, at which point ridge again becomes about same as between the cuspids.

Now I would very much appreciate any information that may be of help to me in this case because the health of the patient requires that her food enter her stomach in a different condition from what it does at the present time, and will especially appreciate any help because of the fact that the baby is needing shoes and this patient has the coin to pay for dentures that will be of benefit to her.—G. B. H.

ANSWER.—You had better master the Greene-Supplee, Hall or some other muscle trimmed impression; pour them with Spence's plaster, and set the teeth to a balanced bite. Get some mighty good experience out of it and let your patient pay for your education as well as the baby's shoes. —V. C. S.

Question.—In treating for putrescent pulp I find often after the soreness and bad odor have left the tooth that in testing the dressing in H_2O_2, there is a small amount of effervescence. (1) Could this be caused by moisture entering through the apex? (2) Are we justified in filling the root canals after a reasonable number of treatments if we still have effervescence in testing the dressing?—C. R. T.

ANSWER.—Answer No. 1. Effervescence might be caused by moisture either of putrescence or of sterile serum.

Answer No. 2. I think not. The canal should be dry when filled even though sterile.—V. C. S.

Editor DENTAL DIGEST:

In your magazine for October H. J. Tingman writes concerning somnoform. I wish to say for the first 30 years of my practice I used N_2O which I considered the safest of any general anesthetic. I did not always like my cases. For about 10 years now I have used somnoform and so far I have found it a very safe and reliable anesthetic and I like it very much. With the exception of cocain (which I use the most of all) it is the only anesthetic I use in my practice. Up to the present time I have never had any trouble with it.

J. A. ROBINSON,
Morrisville, Vermont.

THE BEST OF CURRENT THOUGHT

[*The International Journal of Orthodontia*, November, 1916]

Original Articles

A Study of the Cubic Capacity and Superficial Area of the Maxillary Sinus. By Virgil Loeb, A.B., M.D., D.D.S., St. Louis.

The Use of the Lingual Arch in the Treatment of Malocclusion as Used by Dr. Lloyd S. Lourie. By Martin Dewey, D.D.S., M.D., Kansas City, Mo.

The Practical Use of Tungsten and Molybdenum in Orthodontic Appliances. By H. C. Pollock, D.D.S., St. Louis.

The Development of the Mandible as a Result of Treatment of the Protruding Upper Incisors and Distoclusion of the Arch. By W. A. McCarter, D.D.S., Topeka, Kansas.

Norman Greene Reoch, D.M.D. By Mark D. Littig, D.D.S., M.D., and Frederick A. Keys, D.M.D.

Is Facial Development an Index to Character? By Edward L. Mitchell, D.D.S., Indianapolis, Ind.

DENTAL CARIES IN CHILDHOOD

Modern medicine is concerned with the prevention of disease and nowhere is there a wider field for the exercise of this function than during childhood. A preventive measure of prime importance is the care of the teeth. Unfortunately, many dentists do not realize the importance of caring for children's teeth. They argue that it is not worth while caring for the deciduous teeth, and in reply to the statement that neglect of the deciduous teeth may result in permanent deformity they reply that the permanent teeth may be deformed anyway. Ignorance is the greatest obstacle in the way of securing proper dental care. Dental deformities frequently mean much more than merely deformities of the teeth. They may be responsible for deformities of the face and jaw, and they may be a factor in the production of adenoids, nasal hypertrophy and tonsillar enlargements. The selection of a proper dietary has an important bearing on the development of the teeth. Malocclusion interferes with proper mastication and is therefore the starting point of many nutritional disorders. The digestion of starches cannot be normal if mastication is imperfect. Infections of the teeth cause dental caries and pyorrhea. The chemicobacterial theory is now generally accepted as explaining the causation of caries. On this theory caries is attributed to a fermentative process. Particles of carbohydrate food become lodged

in the crevices of the teeth, fermentation takes place, and the acid products of the fermentation attack the enamel of the teeth. Hence the soft, sweet, sticky foods of which children are so fond may be regarded as a cause of dental caries. It has been found that pyorrhœa alveolaris almost always causes other infections. There is a definite relationship between pyorrhea and the various focal infections with which we are all familiar. The first step toward the relief of the present situation is to make the medical profession realize the significance of dental hygiene. Their interest must be stimulated so that they will undertake to awake a general interest in this subject in their own communities. The dentist must come to realize that he is not merely an artisan and a mechanic, but that he is working in a definite field of medicine and that the care of the teeth of children is of sufficient importance to merit his most careful consideration. Parents must be made to realize the importance of proper development and care of the teeth in children and must be taught that such care is worth paying for. Proper provision should be made for the care of the teeth of children whose parents are unable to pay for this service. Every clinic for children should recognize that a dental department is an inherent part of its organization.

[*The Dental Review*, December, 1916]

Original Communications

CONDUCTIVE ANESTHESIA; WITH LANTERN SLIDE DEMONSTRATION

By H. A. Potts, M.D., F.A.C.S., Chicago, Ill.

Inflamed tissue is more painful to needle puncture and infiltration, and the anesthesia is not so satisfactory. In such cases either conductive anesthesia by blocking the nerve-trunk or infiltrating an area around but beyond the inflamed area, which is only the conductive method applied to the smaller nerve branches, should be induced. High blood-pressure militates against a prolonged and successful anesthesia.

The tissues are not easily blanched by the adrenalin and the red color returns very quickly; the anesthesia cannot remain long enough to effect a satisfactory combination with the nerve elements. In the injection of bone, age plays an important rôle and the success of the infiltration is dependent upon the foramina beneath the periosteum through which the anesthetic must pass. These foramina are more numerous in young subjects.

[*Dental Items of Interest*, November, 1916]

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Radiodontia

Simplified Technique for Making Dental Radiographs. By F. T. Van Woert, M.D.S.
Important Prenatal Factors That Influence the Development of the Facial Area, and Cause Malrelation of Dental Arches at Birth. By Dr. B. W. Weinberger.
Some Studies of the Histopathology of Pyorrhœa Alveolaris. By F. Hecker, B.S., D.D.S., A.M., M.D.
Dentistry in Public Institutions (Insane). By Frederick A. Keyes, D.M.D.
Municipal Dental Clinics. By Matthew Carney, D.M.D.
*A Renaissance in Prosthodontia.

[*The Dental Cosmos*, December, 1916]

Original Communications

Some Important Causes of Periapical Infections. By Carl J. Grove, Ph.G., D.D.S.
Diagnosis and Treatment of Vincent's Angina: Report of a Case Involving the Lungs. By Thomas P. Hinman, D.D.S.
A Clinical and Experimental Study of Chronic Alveolar Abscess in Relation to Systemic Disorders. By Thomas L. Gilmer, M.D., D.D.S., Sc.D.
Adaptation of the Porcelain Jacket Crown. By J. E. Argue, D.M.D.
Diet and the Tooth-brush. By A. W. Crosby, D.D.S.
The Relation of Mastication to Nasal Breathing. By John Kepke, M.D.
Nitrous Oxid-Oxygen—Alone, in Mixture, and in Sequence—for Dental Operations. By W. Guy, F.R.C.S., L.R.C.P., L.D.S. (Ed.).
Dental Inspection of Employees in Large Corporations. By George J. Krakow, D.D.S.
The Inertia of Custom. By Henrik Shipstead, D.D.S.
President's Address (Eastern Association of Graduates of the Angle School of Orthodontia). By H. E. Kelsey, D.D.S.

[*The Dental Register*, November, 1916]

Event and Comment.
Supplee Impression Method.
A Proper Dietary for Dentists.
Personal Experience.
Mouth Infections.
Announcements
Bibliography.

[*The American Dentist*, December, 1916]

DENTISTRY AND THE LAW

By B. F. Lockwood, D.D.S., Yankton, South Dakota

It should be possible for a dentist who has graduated from a reputable dental school, and practised a certain number of years in one state, to locate in another state without a new examination, providing he has been a straight and honest man. However, this cannot be done.

It is amusing to look up certain state laws and see the various requirements demanded. Take Iowa and South Dakota for example: The state of South Dakota permits an applicant to take an examination upon filing an affidavit that he has been in practice for five years. Iowa, on the other hand, demands a diploma from a good dental college, and also a diploma from a high school.

Now, there are many good men in practice to-day who have not had a high school education, or the equivalent. Iowa, has by its ruling, barred a lot of dentists from even taking the examination for a license in this state.

Is it fair that a man could legally practise in McCook, South Dakota, and be a criminal if he went across the river into Sioux City, Iowa, to extend his professional skill to a patient who desired his services? It is so crude as to be humorous. I am not criticizing the state boards, because they are only trying to do their duty as the law demands.

No doubt, the professional standard of South Dakota should be brought up equal to that of Iowa; but until the law is changed, it is impossible, for, by the present laxity of the law, any man with the least smattering of dentistry can open up an office in South Dakota and proclaim himself a dentist.

The question is: "What are we going to do about the perfectly well-qualified dentist, who, having practised a number of years, may be forced to move from the state for various reasons. He is probably a little rusty in theory, but, is he not better qualified to practise upon the public after his years of experience, than a newly graduated man would be? He is certainly a better dentist, but I doubt his ability to pass a hostile state board. Is it not unfair to refuse him a license? I believe we will all agree that it is; but why do we continue to stand for it?

I know a man who has been in a state practising dentistry for over ten years without a license, diploma, or scratch of a pen, to show that he is a dentist. I sat next to this man at a state board examination nine years ago, and on some subjects, he could not write two lines. He quit before it was half over and refused to take an examination until the

United States Supreme Court handed down a decision against him, and sustaining the Circuit Court of the state. This man is still in practice and has never served the jail sentence imposed upon him by the Circuit Judge. It seems queer that the highest official of the state would pardon such a man; but such is the case. Is it fair that the man who wants to be on the square and comply with the law, should be barred from taking a state examination, because he is lacking a high school diploma, while another man can practise in another state without any written credentials as to his *professional* schooling? Is it not high time that we get busy on these things and at least be fair to the men who are giving the best years of their life to the practice of dentistry?

Old Mexico has it on the United States in one respect relative to dental laws. The writer is registered to practise in Mexico, and his license was granted after complying with the requirements of the country (then at peace), and it is extended not to one state in Mexico but to every state of the republic.

[*New Jersey Dental Journal*, November, 1916]

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[*The Dental Summary*, December, 1916]

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[*The Dental Cosmos*, November, 1916]

MORPHINISM AND COCAINISM

By Charles Vetter, D.D.S., New York City

Lecturer on Materia Medica, Pharmacology and Dental Therapeutics, New York College of Dentistry.

There are two classes of drugs, habit-forming and non-habit-forming. Those which have a tendency to induce a person to become addicted to their use are of course of the first or drug-habit-forming class, and consist either of narcotics or hypnotics. They all act more or less upon the secretory glands. All narcotics and hypnotics diminish secretion and excretion, and have a tendency to produce toxemia. The drugs of the non-habit-forming class will not produce a habit, irrespective of how long they are administered, and have no marked physiological action upon the secreting glands so far as depression is concerned. From time immemorial, people have been taking drugs or substances for the relief of pain. History tells us that several of the drugs that are used at the present time to deaden pain were used by savages centuries ago for practically the same purpose. We find that for thousands of years opium has been used for the relief of pain and to produce stupor. Hemlock was used by the ancients for its stupefying effects. Socrates was compelled to drink a decoction of hemlock as the means of his execution, hemlock being one of the drugs which produce a poisonous narcotic effect. Besides opium, cannabis indica, and hemlock, we have drugs of later origin, like cocain, chloral, chloroform, and ether, that are used for the same purpose. Regarding the drug-forming habit, we find that (1) it is caused by a physical condition, (2) it can be and is produced by a mental or moral condition, and (3) it is produced accidentally.

CONDITIONS CAUSING DRUG HABIT

We know that pain is not a disease but a symptom, and we know that when pain makes itself manifest, it is our desire and always has been mankind's desire to relieve that condition. If a painful condition exists, a drug is prescribed for its relief. If that drug is potent and a sufficient quantity is used it will help the painful condition. If the pain should reappear, it is but natural that the prescriber or the patient should resort to the same medicament for relief. This, therefore, will be the first cause that will bring about the opium or morphine addiction. The mental or moral form is brought about by a morbid mental condition more than anything else. We find a certain class of people who are always looking for a gratification of the senses in some direction or other. It

may be that alcohol is used to satisfy this craving; maybe their desires run in sexual channels, and they look for gratification in that direction, or maybe both sexual and alcoholic gratification are not sufficient, and they then resort to some other means, *i. e.* to the use of the various narcotic drugs. This, therefore, would be the second cause. The third cause, which is termed accidental, occurs when the patient takes some proprietary preparation which is advertised extensively to cure or relieve certain conditions, and continuing its employment, before long finds that he has become addicted to the use of this medicine, which contains nothing more of an active character than a narcotic drug in some form or other. These constitute the three conditions causing the drug habit.

The higher the intellect of a person, the more readily will he respond to medication, and the more quickly will he yield to drug temptation. A physician with a large practice, coming home tired from his toils, finds that there are several calls for him still to make. He is fatigued, but he knows that there are substances which he can take to stimulate and enable him to attend to these calls, and he perhaps resorts to such a stimulant in the form of alcohol. The alcohol will stimulate his brain to activity, and will remove his fatigued condition at least temporarily. This may continue for several weeks, and while alcohol is an excellent stimulant, it nevertheless leaves its odor upon the breath of partaker. The result may be that in order to avoid detection, he will resort to other substances that cannot be detected so readily and he may take a dose of morphine. This will invigorate him, allow him to go about his business with renewed activity, under the stimulant which the morphine produced, with no apparent deleterious results. Gradually, however, it will become impossible for that physician to continue his labors without resorting to the use of morphine, and so he becomes enslaved to the use of this medicament, first, because he cannot attend to his duties without the stimulant, and secondly, because the after-effects of the previous dose may have made him a partial wreck. One of our greatest poets, De Quincey, has done more harm to mankind by the description of the beautiful effects of opium in his work "Confessions of an Opium-smoker" than has any other writer. Of course, his brain was befogged and unnatural, and no one else has ever been able to receive the same impressions and satisfaction that he describes in his book.

THE COCAINE HABIT

Another condition which is properly termed a habit is the cocaine habit. The Peruvian and Bolivan natives for centuries have chewed the leaf of a shrub to invigorate them and to diminish fatigue. The drug known as cocaine is the active ingredient of the dried leaves of a species of coca—

Erythroxylon coca. This alkaloid, cocaine, has probably done, in a certain way, as much injury as has been produced by the use of opium or morphine. We know that nose specialists first used this drug because it had a marked action upon the mucous membrane of the nose in producing a condition of anesthesia which allowed the performance of painless operations in the nasal cavity. It has also been used extensively in dentistry for its local anesthetic effects. The natives of South America used it as a stimulant to enable them to perform more arduous labors. When it is applied to the nostrils, it produces a certain amount of stimulation or abnormal strength.

The following official drugs generally used in dentistry are affected by the National Narcotic Law: Apomorphine, cocaine, codeine, opium, and its preparations; morphine.

The preparations of the National Formulary affected are: Elixir of chloroform; compound elixir of terpin hydrate and heroin; Sun, Squibb's Loomis and Thielmann's diarrhœa mixtures; Magendie's solution of morphine; syrup of ipecac and opium; tincture of kino compound.

The drugs and chemicals affected are: Acid meconice, eucaine, alpha, beta, and all other salts; holocaine, narceine and its salts; narcotine and its salts; stypticin; tropocain and its salts.

The following agents contain either opium, morphine, codeine, etc., but not in sufficient quantity to require a special order blank when purchased or sold, or when dispensed by a physician or a dentist: Camphorated tincture of opium U. S. P., compound mixture of glycyrrhiza U. S. P., opium plaster, antiperiodic tincture (*i. e.* Warburg's tincture) N. F., compound syrup of morphine N. F.

The provisions of the narcotic law apply to the United States, the District of Columbia, the territory of Alaska, the territory of Hawaii, the insular possessions of the United States, and the Canal Zone; they also apply to Porto Rico and the Philippine Islands.

In conclusion: Narcotics surely are a boon to mankind if used judiciously; if abused, they are productive of untold injury.

[*Pacific Dental Gazette*, November, 1916]

The Responsibility of the Dentist for the Early Diagnosis of Precancerous Oral Lesions. By Marshall.
The Relation of Affections of the Teeth to the Work of the Rhinologist. By Montgomery.
Discussion of the Relation of Affection of the Teeth to the Work of the Rhinologist.
Cocaine Pressure-Anesthesia.
"Should This Tooth Be Extracted?" By Coolidge.
A Wise Compromise. By Noyes.
Crown and Bridgework on a Physiologic Basis. By Chayes.
The Pharmacology of Novocaine. By Eggleston.

[*The Journal National Dental Association*, November, 1916]

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[*The Journal American Medical Association*, December 2, 1916]

THE VALUE OF BOILED MILK (*Editorial*)

A recent paper on the use of boiled milk in infant feeding and elsewhere, which appeared in *The Journal*,* will serve to focus attention anew to the anomalous situation relating to the place of heated milk in the dietary. The obvious menace from micro-organisms which attends the use of raw milk led to the introduction of some mode of heating to avert the dangers of bacterial infection which even rigorous inspection cannot always discover. Heating milk to 60 C. (140 F.) and holding it at that temperature for from twenty to thirty minutes will destroy the viruses of tuberculosis, typhoid fever, scarlet fever, diphtheria, Malta fever, dysentery, foot and mouth disease; and it will also destroy streptococci, staphylococci, and practically all the non-spore-bearing micro-organisms pathogenic for man. To provide a factor of safety a somewhat higher

*Brennemann, Joseph: The Use of Boiled Milk in Infant Feeding and Elsewhere, *The Journal* A. M. A., Nov. 11, 1916, p. 1413.

temperature and longer period of heating are often adopted in the usual routine of pasteurizing milk. The product treated in this way does not exhibit any obvious alteration in taste or digestibility.

The actual boiling of milk or heating to the temperature of boiling water is even more effective as a means of sterilization, and was early employed. Boiled milk has been used widely, particularly in certain European countries, to replace raw milk in infant feeding; but in America a widespread prejudice has arisen against it. We are told that the more vigorous heating effects certain decompositions in the product: the proteins are somewhat altered; the sugar is liable to become slightly oxidized; the normal emulsion of the fat globules is changed; the digestibility varies from that of raw milk. Boiled milk has been charged with being exceptionally constipating to infants. For these and related reasons there has been a tendency to prefer prolonged pasteurization at lower temperatures to the simpler expedient of boiling.

More recently both boiled and pasteurized milks have been assailed as undesirable in that certain ill defined biologic properties—enzymes, immune substances, etc.—are lost by the heating processes. Most specific is the charge that the prolonged exclusive use of even pasteurized milk leads to the manifestation of scurvy. This disease in children can readily be averted by the use of orange juice and other antiscorbutics. In debating the value of pasteurization it has accordingly become necessary to balance the acquired safety from bacterial infection against the alleged loss of the anti-scorbutic virtues of raw milk. As an outcome of all this, the most varied contentions are put forth. One group of enthusiasts insists on the ideal of a pure, clean milk supply certified so as to do away with a need of safeguards in the nature of heat; another demands pasteurization as an indispensable adjunct to inspection; and now we are asked to consider anew the advantages of boiled milk. Thus, as Brennemann remarks·

There has naturally grown up in this country a strange transitional medley of ideas of different men who follow these changes with an unequal pace, much to the amusement and often unconcealed disgust of the nonpediatric physician, who sees in our progress only a change from one idea to another. Our textbooks nearly all favor raw milk, if pure. The literature is increasingly more favorable toward boiled milk. The newspaper and magazine writers, who have become a tremendous factor in popular education, get their inspiration from standard textbooks and dwell on the evils of boiled milk and the dangers of raw milk, and advocate pasteurized milk as a popular measure. Boards of health, city councils and philanthropists keep the same pace, and the poor mother who reads the popular treatises on the baby and the newspaper and magazine articles that seem so

authoritative is amazed at the physician who tells her to boil the baby's milk, and especially so if she has already provided herself with certified milk!

The foremost objection thus far raised to heated milk concerns the alleged appearance of scurvy attending its use. A. F. Hess in particular has contended vigorously for the seriousness of this danger, and has studied various antiscorbutic expedients which may be employed to prevent nutritive disaster from the use of pasteurized milk. The recent enthusiasm for the vitamin doctrine has made it easy to ascribe harm to the destructive action of heat on some as yet unidentified vitamin in milk. Not all vitamins appear to be so sensitive to heat, however. Even a superficial study of the literature on scorbutus serves to awaken an appreciation of the paucity of dependable knowledge on the subject.

The guinea-pig has served as the classic experimental animal for the investigation of scurvy. By extremely one-sided diets of certain cereal grains, Holst and his co-workers were able to produce the typical symptoms and to prevent them by the use of certain antiscorbutics. Some of the subsequent attempts to apply this method to the solution of the milk problem have been disappointing. How unjustifiable sweeping conclusions based on the guinea-pig experiments may be is indicated by the recent studies of Jackson and Moore.* Experimental scurvy was produced by them in guinea-pigs on diets of pasteurized, raw, boiled, skimmed and condensed milk, milk and green vegetables, thyroid extract and milk, and many other dietary combinations. The onset of symptoms with these milk diets of various kinds was quite early. They were even produced by feeding whole milk, oats, and hay water.

To these uncertainties respecting the rôle of milk in the production of scurvy may be added the conclusions of a recent reviewer of the evidence on the subject. In a report published under the direction of the Medical Research Committee in Great Britain, Dr. Lane-Claypon says:

> Cases of Barlow's disease have always attracted, and will probably continue to attract, very considerable attention on the part of the medical profession. The acute symptoms, followed by their rapid subsidence under adequate treatment, compel attention, although the disease cannot be regarded as in any sense one of common occurrence. It has been stated to be due to the use of heated milk, but the degree of heat and the method of heating employed have not in every case received that attention which they deserve, before the statement was made. Most physicians appear now to have relinquished the general idea that this disease is produced by the heating

* Jackson, Leila, and Moore, J. J.: Studies on Experimental Scurvy in Guinea-Pigs, Jour. Infect. Dis. 1916, xix, 478.

of milk, but it cannot be said that an adequate explanation of its etiology has been reached. . . . There is no evidence to show that the use of heated milk is productive of rickets in young children.

Pasteurization has many almost insurmountable technical difficulties. Boiled milk has obvious bacteriologic advantages in the established freedom from dangerous micro-organisms. According to Brennemann, the heating which it demands does not impair the nutritive properties in comparison with those of milk merely heated to pasteurization temperatures. The digestibility is claimed to be decidedly enhanced. Brennemann's defense of boiled milk therefore deserves a careful consideration without prejudice from any current doctrine. There is occasion here to exhibit the "open mind."

HUMAN INSTABILITY

When, as evolutionists would have us believe, the human being ceased progressing on all fours and began to "locomote" on two legs, thereby shifting his centre of gravity, he lost greatly in stability. As a result, the number of deaths from falls ranks fourth or fifth in the number of deaths becoming the object of legal investigation, that is, reaching the coroner's office. Incidentally, it has the same high place in the tables of causes of accidental injuries compiled by various accident insurance companies. According to the mortality statistics for 1914 issued by the Bureau of Census, there were 9,904 deaths from this cause in that year, a rate of 15 per 100,000 population. It is interesting to compare this with the number of deaths from typhoid fever in the same period—10,185, or a rate of 15.4, or the number of deaths from scarlet fever, 4,340, a rate of 6.6 per 100,000. However, loss of equilibrium is not in itself the chief cause of accidents and deaths from falls. According to the records of the coroner's office of Chicago and Cook County for 1915, there occurred 318 deaths from falls. Of these 28 were due to loss of balance, 58 to some obstruction in the line of pedestrian travel, 50 to intoxication, 36 to diseases, 29 were of babies, who, left alone, had fatal falls, 22 were of the aged and feeble, 19 were due to slipping on ice, banana peels and other slippery objects, and the remainder were scattered among a long list of causes.

Worcester, Mass.

Editor DENTAL DIGEST:

Can some one give me a formula for a cleansing fluid that is harmless and at the same time sure? Please oblige,

Yours truly

E. T. Fox.

[*The Dental Outlook*, December, 1916]

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[*Medical Record*, December 2, 1916]

Original Articles

ROENTGENOGRAPHIC DIAGNOSIS OF DENTAL INFECTIONS IN SYSTEMIC DISEASES

Dr. Sinclair Tousey of New York read this paper and showed numerous lantern slides. He drew the following conclusions: A putrescent mass in the pulp chamber of a tooth might exist for months or years because the walls of the cavity could not collapse and were incapable of throwing out granulations and eventually filling the cavity with healthy tissue, which was the natural process of curing an abscess in the soft tissues of the body. This putrescent mass might constantly poison the bony tissue surrounding the apical foramen sufficient to produce an effect clearly recognizable in a radiogram. This condition might be unknown to the patient, and sometimes not reveal itself to the usual tests applied by the dentist. From this long-existing source of infection secondary lesions and symptoms of the gravest and most diversified character might arise. The X-ray was to be depended upon to show whether or not the source of trouble was connected with the teeth or the pneumatic sinuses, and if so, whether the trouble was due to malposition and unnatural pressure or to infection. It would be a mistake to regard every case as due to the teeth.

BOOK REVIEWS

FIFTY-FIVE MODERN DENTAL OFFICE PLANS. Published by The Ritter Dental Manufacturing Company, Rochester, N. Y.

We are in receipt of a little book entitled Fifty-five Modern Dental Office Plans, which practically without the use of words, imparts so much economic wisdom that it should appeal to any dentist who is not sure that his office is arranged to allow him to work with the greatest economy and to the greatest advantage.

Not so very long ago a subscriber to this magazine who had been making an analysis of the economic side of his practice, and whose vision had been broad enough to take into that analysis the arrangement of his rooms, was able to show that he was walking seventeen unnecessary miles per year between his laboratory and his chair, because, in the lack of arrangements which then existed, he had unthinkingly placed his laboratory about as far from the operating room as his space permitted. A rearrangement was easily effected, and not only saved the unnecessary walking and the time involved, but proved to be only an initial step along a line of very profitable readjustment of the office.

The plans in this little book offer advantageous arrangements of office from the simplest to the most extensive, and many dentists, comparing these arrangements with their own floor space, will find one closely suited to their requirements.

All of these plans include a space set aside as a Retiring Room, where patients brush the hair and resume their outer clothing.

An important point, and one which will be appreciated by dentists who are putting their practices upon an economic basis is that the passage from the Reception Room to the Operating Room leads through the Business Office, so that the patient comes first in contact with the secretary, for arrangement of appointment and other details, and the patient whose work is finished passes out by the secretary, in whose hands it may be desirable to place all the business arrangements, since a secretary who combines strength of mind with tact, will often be a better collector than the dentist would be in his own interest.

This book is published by the Ritter Dental Manufacturing Company

at Rochester, New York, and we understand it is sent to dentists upon request.

MOUTH HYGIENE. *A Course of Instruction for Dental Hygienists.* A Text-Book Containing the Fundamentals for Prophylactic Operation. Compiled by ALFRED C. FONES, D.D.S., Bridgeport, Conn., Edited by EDWARD C. KIRK, Sc.D., D.D.S., LL.D.; ROB'T H. W. STRANG, M.D., D.D.S., and ALFRED C. FONES, D.D.S. Octavo, 530 pages, with 278 engravings and 7 plates. Cloth, $5.00 net. Lea & Febiger, Publishers, Philadelphia and New York, 1916.

The increasing importance of mouth hygiene in its relation to preventive dentistry, and to good health makes the advent of the above book most timely.

The book is very intelligently compiled from a course of lectures delivered to young women in Bridgeport, Connecticut, by the different contributors who took up this work at Dr. Fones' instigation.

The editor and the contributors earnestly desire that educational institutions will take up this work.

A glance at the names of these contributors will easily show that the book is worth while.

Some of the most important matters connected with dentistry are considered as the following will show.

I. Anatomy. By Raymond C. Osburn, Ph.D.
II. Special Anatomy. By Robt. H. W. Strang, M.D., D.D.S.
III. Physiology. By Alexander M. Prince, M.D.
IV. Bacteriology and Sterilization. By L. F. Rettger, Ph.D.
V. Inflammation. By LeRoy M. S. Miner, M.D.
VI. Deposits and Accretions upon the Teeth. By Edward C. Kirk, Sc.D., D.D.S., LL.D.
VII. Dental Caries. By Edward C. Kirk, D.D.S.
VIII. The Teeth as a Masticating Machine. By Charles R. Turner, M.D., D.D.S.
IX. Malocclusion of the Teeth. By Rodrigues Ottolengui, M.D.S., D.D.S., LL.D.
X. Pyorrhœa Alveolaris. By R. G. Hutchinson, Jr., D.D.S.
XI. Odontalgia and Alveolar Abscess. By M. L. Rhein, M.D., D.D.S., D.R.C., U.S.N.
XII. Dental Prophylaxis. By Alfred C. Fones, D.D.S.
XIII. Chemistry of Food and Nutrition. By Russell H. Chittendon, Ph.D., LL.D., Sc.D.
XIV. Dermatology. By George M. MacKee, M.D.
XV. Factors in Personal Hygiene. By C. Ward Crampton, M.D.
XVI. Fresh Air and Correct Posture in Their Relation to Hygiene. By Professor Irving Fisher.
XVII. Lengthening the Life of the Resistive Forces of the Body. By Wm. G. Anderson, M.D., Dr. P.H.
XVIII. The Teaching of Mouth Hygiene to School Children. By Thaddeus P. Hyatt, D.D.S.
XIX. Institutional Dentistry. By A. C. Fones, D.D.S., Frederick A. Keyes, D.M.D., and Cordelia L. O'Neill.

It would be well if dentists and physicians were to place in the hands of their office assistants a copy of this book; it is a most important volume and the cause of Oral Hygiene will be greatly influenced by the study of it.

SOCIETY AND OTHER NOTES

ANNUAL CLINIC OF THE CHICAGO DENTAL SOCIETY

The annual clinic of the Chicago Dental Society will be held at the Hotel La Salle, January 26-27, 1917.

Extensive preparations are being made to make this one of the best clinics ever held by the society.

Papers of the highest type, clinics demonstrating the very latest and best in modern dentistry, exhibits of the newest appliances by firms from all over the United States, and a banquet that will be a pleasure long to be remembered are but a part of the features of this great meeting.

Dr. Joseph C. Bloodgood of Baltimore will present the paper at the meeting on Friday evening and at the banquet on Saturday evening, Dr. Vincent of Minneapolis will be the first speaker after which the meeting will take the form of a testimonial for Dr. Edmund Noyes.

Headquarters, Hotel La Salle.

GEORGE C. POUNDSTONE,
President.

PERCY B. D. IDLER, *Secretary.*
30 N. Michigan Ave., Chicago.

FUTURE EVENTS

January 8–12, 1917.—Montana State Board of Dental Examiners will meet in Helena, Montana, for examinations.—G. C. CHEVIGNY, *Secretary.*

January 9, 1917.—South Dakota State Board of Dental Examiners, Sioux Falls, S. D., beginning at nine o'clock and will continue three days.—ROBERT JASMANN, Scotland, So. Dak., *Secretary.*

January 11, 1917.—North Carolina State Board of Dental Examiners, Greensboro, N. C.—F. L. HUNT, Asheville, N. C., *Secretary.*

January 23–25, 1917.—American Institute of Dental Teachers, Hotel Adelphi, Philadelphia, Pa.—ABRAM HOFFMAN, 529 Franklin St., Buffalo, N. Y., *Secretary-Treasurer.*

February 23-24, 1917.—Annual convention of the Minnesota State Dental Association, University of Minnesota, Minneapolis, Minn.—MAX E. ERNST, 541 Lowry Bldg., St. Paul, Minn., *Secretary.*

March 13, 1917.—Fourteenth Annual meeting of Fox River Valley Dental Society, Fond du Lac, Wis.,—R. J. CHADY, Oshkosh, Wis., *Secretary.*

May 1, 1917.—Mid-west Dental Convention and Exhibit, Des Moines, Ia. Conducted by Iowa State Dental Society and the Dental Manufacturers' Club.

May 9–11, 1917.—Annual meeting of the Kentucky State Dental Association, Louisville, Ky. W. M. MARSHALL, Louisville, Ky., *Secretary.*

May 10–12, 1917.—Dental Society of the State of New York, Rochester Dental Dispensary, Rochester, N. Y.—A. P. BURKHART, 52 Genesee St., Auburn, N. Y., *Secretary.*

June 27–29, 1917.—North Carolina Dental Society, Fifty-third Annual meeting, Durham, N. C.—R. M. SQUIRES, Wake Forest, N. C., *Secretary.*